

The type specimens of sawflies (Hymenoptera: Symphyta) of the Museo Nacional de Ciencias Naturales, Madrid

ANDREAS TAEGER^{1,3}, MERCEDES PARÍS² & JOSE LUIS NIEVES-ALDREY²

¹*Senckenberg Deutsches Entomologisches Institut (SDEI), Eberswalder Straße 90, 15374 Müncheberg, Germany.*
E-mail: ataeger@senckenberg.de

²*Museo Nacional de Ciencias Naturales, Madrid (MNCN, CSIC) c/ José Gutiérrez Abascal 2, 28006 Madrid, Spain.*
E-mail: m.paris@mncn.csic.es; aldrey@mncn.csic.es

³Corresponding author

Abstract

The type specimens of sawflies (Hymenoptera: Symphyta) housed in the Museo Nacional de Ciencias Naturales, Madrid, were examined. Lectotypes are designated and illustrated for the following 32 nominal taxa (preserved in the MNCN collection if not stated otherwise): *Tenthredo acutiscutis* Konow, 1908; *Tenthredo aericeps* Konow, 1907; *Allantus albipectus* Konow, 1907; *Athalia bolivari* Dusmet, 1896; *Tristactus punctatus* var. *candidatus* Konow, 1899; *Tenthredo capistrata* Konow, 1907; *Megalodontes capitalatus* Konow 1904 (coll. SDEI); *Tenthredo casta* Konow, 1908; *Clydostomus cestatus* Konow, 1908; *Miocephala chalybea* Konow, 1907 (coll. SDEI); *Peus cupreiceps* Konow, 1907; *Metallopeus cupreolus* Malaise, 1945 (coll. NHRS); *Allantus dusmeti* Konow, 1894 (coll. SDEI); *Megalodontes dusmeti* Enslin, 1914 (coll. ZSM); *Megalodontes escalerae* Konow, 1899; *Tenthredo flavitarsis* Konow, 1908; *Sciopteryx galerita* Konow, 1907; *Tenthredo habenata* Konow, 1907; *Allantus inguinalis* Konow, 1908; *Clydostomus merceti* Konow, 1908; *Megalodontes merceti* Konow 1904 (coll. SDEI); *Tenthredo mordax* Konow, 1908; *Megalodontes mundus* Konow, 1904; *Tenthredo nimbata* Konow, 1906; *Tenthredo oculissima* Konow, 1907; *Peus pannulosus* Konow, 1907; *Tenthredo podagraria* Konow, 1907; *Arge segmentaria* var. *rufiventris* Konow, 1899; *Tenthredo rugiceps* Konow, 1908; *Tenthredo segregata* Konow, 1908; *Peus splendidus* Konow 1907; *Tenthredo suta* Konow, 1906. *Peus cupreiceps* Konow, 1907, is considered to be a valid species. New synonymy is proposed for *Tenthredo* (*Metallopeus*) *cupreiceps* (Konow, 1907), **comb. nov., spec. rev.** (= *Metallopeus cupreolus* Malaise, 1945, **syn. nov.**; = *Metallopeus inermis* Malaise, 1945, **syn. nov.**).

Key words: Insecta, Tenthredinidae, Megalodontesidae, lectotypes, new synonyms, India (Sikkim), Spain, Cameroon, Turkey, Konow, Malaise, Dusmet

Introduction

In the course of a SYNTHESYS project, the first author studied in 2012 the sawfly collection of the Museo Nacional de Ciencias Naturales, Madrid (MNCN). The Symphyta specimens in this collection were collected mainly during the end of the 19th and first decades of the 20th century. Important collectors of this period were Ricardo García Mercet (1860–1933, Fig. 01), Manuel Martínez de la Escalera (1867–1949, Fig. 02), and José María Dusmet y Alonso (1869–1960, Fig. 03) (Martín Albaladejo, 2004); in fact, most of the specimens listed in this catalogue came to the MNCN entomology collection through Escalera. Whereas Mercet and Escalera never published about sawflies, Dusmet wrote two important papers about the Spanish Symphyta (Dusmet 1896, 1949) and described a new species. Most of the species that are treated below were described between 1894 and 1908 by Friedrich Wilhelm Konow (1842–1908, Fig. 04) based on material he got via Dusmet from the MNCN. Frequently, Konow kept specimens (syntypes) of his new species in his collection (now housed in the Senckenberg Deutsches Entomologisches Institut, SDEI). In his papers it is not always immediately clear, where the types are housed. For example, a remark about the types of *Allantus asperatus* can be found some pages after its description, below *Tenthredo suta*: “Die beiden neuen *Tenthredo*-Arten sowie den *All. asperatus* verdanke ich Herrn Prof. R. Mercet,

in dessen Sammlung sich die Typen befinden.” [translated: ‘For the two new *Tenthredo* species, as well as the *All. asperatus* I am indebted to Prof. R. Mercet, in whose collection are the types.’]. In several cases, there is no indication on the whereabouts of the types, except for a remark by Konow that he got the material through Dusmet, Mercet, or Escalera. Such remarks were frequently overlooked by subsequent authors. As a result, some lectotypes were selected in the past from the Konow collection (=SDEI) instead of the MNCN collection. As the specimens in Konow’s collection are to be considered as syntypes, these actions are valid, and the specimens in the MNCN thus became paralectotypes. Until now, most of Konow’s types in the MNCN have obviously not been examined since the description of the species. The subsequent interpretation of the taxa was based either on the original description, or on the syntypes housed in Konow’s collection in the SDEI (compare Malaise 1945, Saini 2007).



FIGURES 1–4. Portraits (from left). Mercet (Archivo MNCN. Sign. Album de Entomología, p. 16), Escalera (Archivo MNCN. Sign. Album de Entomología, p. 14), Dusmet (Archivo MNCN. Sign. ACN009/001/00092), Konow (Portrait collection of the SDEI).

Material and methods

The treated species are usually rather large and colorful. In most cases, the photographs of the lectotypes will provide sufficient information to enable future checks on the placement of the taxa to be made. Furthermore, the information about the state of preservation at the time of examination, as well as the data of the attached labels can be taken easily from the given photographs. In addition to the figures given in the present paper, figures are presented at figshare.com. These figures may contain additional views, or are of specimens not figured in this paper. The permanent links (DOIs) to the high resolution figures at figshare.com are included here.

Photos were taken at the MNCN with a Leica DFC 420C digital camera attached to a M80 compound microscope, at the SDEI with a Leica DFC 495 camera and a M205 C microscope. Malaise’s specimens were photographed at the NHRS with an Olympus DP70 camera attached to a SZX12 microscope. Composite images with an extended depth of field were created from stacks of images using the software CombineZ5.3, and finally arranged and partly enhanced with Ulead PhotoImpact X3. Complete views of larger specimens (body size > 10 mm) were arranged with Microsoft Image Composite Editor 1.4.4.

Numerous species which are treated here belong to the large genus *Tenthredo* Linnaeus, 1758, in a broader sense. Many *Tenthredo* species are not placed yet in subgenera (Taeger *et al.* 2010). Wherever possible, the *Tenthredo* species treated here were placed in a subgenus. These placements in subgenera are to be considered only as a technical help for the future reclassification of the genus and are not supported by phylogenetic analysis. In some cases the species are left unplaced.

The records in the list are structured as follows:

- **Original name** with author and year of publication.
- Current placement of the nominal taxon, and if necessary the reference to its synonymy.
- **Data of Types:** *Original name* and reference. Original type status, number and sex of types, type locality as given in the original description. Information about the primary type, if necessary including reference to lectotype designation. Type locality according to the labels, including country and if changed, current name of the locality. Information on secondary types.
- **Discussion.**

The sections on the nominal taxa are sorted in alphabetical order of the species-group name. The types in the Entomology collection of the MNCN bear two different numbers: “MNCN Cat. Tipos N°...” identifies with one number all specimens of a type series housed in the MNCN. “MNCN_Ent ...” is the individual number for each specimen.

In the MNCN collection are housed some types of species described by René Malaise, which are labeled as paratypes. Malaise’s type specimens are usually labeled “Typus”, “Paratypus” or “Allotypus”. On the other hand, in the original descriptions frequently no type designation was made by Malaise, or such designations are not clear. In these cases the specimens labeled “Paratypus” are considered to be syntypes. Unfortunately, the whereabouts of many syntypes are unknown. Such specimens are already known from several museums. Where appropriate, lectotypes should be selected from the specimens left in the Malaise collection (NHRS).

Abbreviations:

BMNH	The Natural History Museum, London, United Kingdom
MNCN	Museo Nacional de Ciencias Naturales, Madrid, Spain
NHMW	Naturhistorisches Museum Wien, Austria
NHRS	Naturhistoriska riksmuseet, Stockholm, Sweden
RFT	coll. R. Forsius, Åbo Akademi, Turku, Finland
SDEI	Senckenberg Deutsches Entomologisches Institut, Müncheberg, Germany
ZSM	Zoologische Staatssammlung, München, Germany

Results

Tenthredo acutiscutis Konow, 1908

A valid species, *Tenthredo (Olivacedo) acutiscutis* Konow, 1908.



FIGURE 5. *Tenthredo acutiscutis*, lectotype ♀. a. dorsal, scale 5 mm; b. head and thorax dorsal; c. head and thorax lateral; d. lateral; e. face; f. labels.

Types. *Tenthredo acutiscutis* Konow, 1908: 22. Syntypes ♀, “Sikkim”. Lectotype ♀, hereby designated (MNCN_Ent 100183, MNCN Cat. Tipos N° 8119, Fig. 05, see also <http://dx.doi.org/10.6084/m9.figshare.746991>). Type locality: India, Sikkim. Paralectotype ♀, same data as lectotype (SDEI, <http://dx.doi.org/10.6084/m9.figshare.775349>).

Discussion. Konow had more than one syntype to hand (he gave a body size range). Malaise (1945: 237, plate XV) considered the syntype in the SDEI to be a paratype, and labeled it accordingly. Saini also examined this specimen, and supposed the holotype and a paratype to be in the SDEI (Saini 2007). The apex of the abdomen of the paralectotype is missing. This species, hitherto unplaced within *Tenthredo*, belongs to the subgenus *Olivacedo* Zhelochovtsev, 1988.

Tenthredo aericeps Konow, 1907

A valid species, *Tenthredo aericeps* Konow, 1907.

Type. *Tenthredo aericeps* Konow, 1907b: 173–174. Syntype(s) ♀, “Sikkim”. Lectotype ♀, hereby designated (MNCN_Ent 100187, MNCN Cat. Tipos N° 8120, Fig. 06, see also <http://dx.doi.org/10.6084/m9.figshare.746972>). Type locality: India, Sikkim.

Discussion. The description of the species gives no information about the number of the types. Possibly the lectotype was the only syntype.



FIGURE 6. *Tenthredo aericeps*, lectotype ♀. a. dorsal, scale 5 mm; b. head and thorax dorsal; c. head and thorax lateral; d. face; e. hind claw; f. labels.

Sterictiphora (sic!) afra Pasteels, 1963

A valid species, *Sterictiphora afra* Pasteels, 1963.

Type. *Sterictiphora afra* Pasteels, 1963: 540–541. Holotype ♂, “Cameroun 1898” (MNCN_Ent 82309, MNCN Cat. Tipos N° 2264, see <http://dx.doi.org/10.6084/m9.figshare.746940>). Type locality: Cameroon (“Kamerun”).

Allantus albipectus Konow, 1907

A junior subjective synonym of *Tenthredo (Temuledo) felderii* (Radoszkowsky, 1871), synonymy by Malaise (1945: 261).

Types. *Allantus albipectus* Konow, 1907b: 167–168. Syntypes ♀, “Sikkim”. Lectotype ♀, hereby designated, (MNCN_Ent 100239, MNCN Cat. Tipos N° 8121, Fig. 07, see also <http://dx.doi.org/10.6084/m9.figshare.751571>). Type locality: India, Sikkim. Paralectotype ♀, same data as lectotype (SDEI, <http://dx.doi.org/10.6084/m9.figshare.779708>).

Discussion. According to Saini (2007: 115) the (assumed) holotype is housed in the SDEI (“IPAL Eberswalde”). However, Konow (1907b: 165) noted under *Sciopteryx galerita*: “Die Typen dieser wie aller folgenden Arten befinden sich im Naturhist. National-Museum in Madrid.” [translated: ‘The types of this and all following species are housed in the Natural History National Museum in Madrid.’].



FIGURE 7. *Allantus albipectus*, lectotype ♀. a. dorsal, scale 5 mm; b. head and thorax dorsal; c. head and thorax lateral; d. face; e. lateral; f. labels.

Tenthredo allantosikkimensis Haris, 2004

A valid species, *Tenthredo allantosikkimensis* Haris, 2004.

Types. *Tenthredo allantosikkimensis* Haris, 2004a: 158. Holotype ♀, “Sikkim” (MNCN_Ent 100188, MNCN Cat. Tipos N° 9887, see <http://dx.doi.org/10.6084/m9.figshare.746954>). Type locality: India, Sikkim.

Tenthredo angustiannulata Malaise, 1945

A valid species, *Tenthredo angustiannulata* Malaise, 1945.

Types. *Tenthredo angustiannulata* Malaise, 1945: 204. Syntypes, 14 ♀, “Burma-Yunnan frontier; Burma (Chin Hills, Mt. Victoria at 2400–2800 m.); Sikkim (Darjiling)”. Type locality. Myanmar: Kachin State: Kambaiti (ca. 25.399°N, 98.118°E). Syntype ♀, Kambaiti (MNCN_Ent 100261, MNCN Cat. Tipos N° 8122, <http://dx.doi.org/10.6084/m9.figshare.850209>).

Discussion. The MNCN specimen will be selected as paralectotype in the results of a study of Malaise’s types (Taeger & Vårdal, in prep.). Other syntypes are known from the NHRS, SDEI, and the Naturkundemuseum Berlin.

Allantus asperatus Konow 1906

A valid species, *Tenthredo* (*Tenthredo*) *asperata* (Konow, 1906).

Types. *Allantus asperatus* Konow, 1906: 125. Syntypes ♀, “Sikkim”. Lectotype ♀ (SDEI, <http://dx.doi.org/10.6084/m9.figshare.746957>) designated by Taeger (1985: 139). Type locality: India, Sikkim. Paralectotype: ♀ (MNCN_Ent 100189, MNCN Cat. Tipos N° 2486), same data as the lectotype.

Discussion. There are about 80 specimens of this species in the MNCN, partly labeled “Sikkim”, partly without any label (most likely all from the same locality). Very likely these specimens are not former syntypes. Konow mentioned a body size of 10–11 mm; the specimens in the MNCN vary between 7.5 and 10.5 mm. Only one ♀ labeled as *asperatus* by Konow is considered by us to be a paralectotype (MNCN_Ent 100189). The male of the species is unknown.

Siobla atra Malaise, 1945

A valid species *Siobla atra* Malaise, 1945.

Types. *Siobla atra* Malaise, 1945: 123. Syntypes 40 ♂, 15 ♀, “Burma - Yunnan frontier, 1800–2000 m. Type locality: Kambaiti.”. Lectotype ♀ (“N. E. BURMA, Kambaiti, 7000ft”, NHRS), designated by Niu & Wei (2013). Paralectotypes from the same locality in various collections. In MNCN 1♀ (MNCN_Ent 100259, MNCN Cat. Tipos N° 8123), 1♂ (MNCN_Ent 100260, MNCN Cat. Tipos N° 8123).

Discussion. The male paralectotype belongs to *Siobla semipicta* Malaise, 1945. The real male of *S. atra* was described by Malaise (1945) as *Siobla rufipes* (see below).

Netroceros bellicornis Konow, 1907

A valid species, *Neaciophora bellicornis* (Konow, 1907).

Types. *Netroceros bellicornis* Konow, 1907a: 495. Syntype(s) “Africa occ. (Kamerun)”. Lectotype ♂ (SDEI, <http://dx.doi.org/10.6084/m9.figshare.779797>) designated by Koch (1998). Type locality: “Kamerun” (= Cameroon). Paralectotype ♂ (MNCN_Ent 100190, MNCN Cat. Tipos N° 12142, <http://dx.doi.org/10.6084/m9.figshare.746961>), same data as the lectotype.

Discussion. Koch (1998) assumed a “Holotypus”. According to Art. 74.6. ICZN, he thus selected a lectotype, as it is not clear from the original description if Konow had more than one syntype.

Athalia bolivari Dusmet, 1896

A junior subjective synonym of *Athalia circularis circularis* (Klug, 1815), synonymy by Benson (1962).

Types. *Athalia Bolivari* (sic!) Dusmet, 1896: 146. Syntype(s) ♂, “Coruña” Lectotype, ♂, hereby designated (MNCN_Ent 82342, MNCN Cat. Tipos N° 2268, Fig. 08, see also <http://dx.doi.org/10.6084/m9.figshare.746925>). Type locality: Spain: Coruña.

Discussion. Benson (1962: 365) synonymized *A. bolivari* with *A. circularis*. Fitton (1978: IV 5) listed the taxon as valid. Most likely the name was simply wrong formatted and should appear in this paper under *circularis* as a synonym. Aksoy *et al.* (1998) mentioned without further explanation larvae of *A. bolivari* on *Capsella bursa-pastoris*. The systematics of *Athalia* require further investigation. It is not unlikely that several species are currently confused under the name *circularis*. The type specimen is obviously a melanistic specimen. It is not quite clear if the type locality concerns the city itself, or the province A Coruña.



FIGURE 8. *Athalia bolivari*, lectotype ♂. a. dorsal, scale 2 mm; b. lateral; c. face; d. labels.

***Periclista bumasta* Konow, 1907**

A valid species, *Malkiatus bumastus* (Konow, 1907).

Type. *Periclista bumasta* Konow, 1907a: 493. Holotype ♀, “Sikkim”. (MNCN_Ent 100191, MNCN Cat. Tipos N° 8124, see <http://dx.doi.org/10.6084/m9.figshare.754524>). Type locality: India, Sikkim.

Discussion. Smith (2006) designated the type specimen as lectotype. Konow (1907a: 493) noted “Die Type befindet sich im Madrider Museum.” [translated: ‘The type is located in the Museum in Madrid’]. This is a clear indication that he had only one specimen in his hands.

***Netroceros calo* Konow, 1907**

A valid species, *Neacidiophora calo* (Konow, 1907).

Types. *Netroceros calo* Konow 1907a: 496. Syntype(s) ♀, “Africa occ. (Kamerun)”. Lectotype ♀ designated by Koch (1998) (MNCN_Ent 100192, MNCN Cat. Tipos N° 12141, see <http://dx.doi.org/10.6084/m9.figshare.754538>). Type locality: Cameroon (“Kamerun”).

Discussion. Koch (1998) assumed a “Holotypus”. According to Art. 74.6. ICZN, he thus selected a lectotype, as it is not clear from the original description if Konow had more than one syntype.

***Tristactus punctatus* var. *candidatus* Konow, 1899**

A junior subjective synonym of *Megalodontes judaicus* (Lepeletier, 1823), synonymy by Taeger, 1998: 191.

Types. *Tristactus punctatus* var. *candidatus* Konow, 1899: 204. Syntype(s) ♀, “in Asia minore prope ab Akbes urbe”. Lectotype ♀ hereby designated (MNCN_Ent 81534, MNCN Cat. Tipos N° 8125, Fig. 09, see also <http://dx.doi.org/10.6084/m9.figshare.754590>). Type locality: Turkey: Hatay: Akbes (36.857°N, 36.518°E; “Akbés”).

Discussion. All taxa formerly treated as species of *Tristactus* Konow, 1897, are currently considered to belong to *Megalodontes judaicus*. The var. *candidatus* is a very pale form that was collected together with darker specimens. Benson (1968: 115) synonymized *T. punctatus* Konow, 1898 with *judaicus*. Without comment, Taeger (1998) listed *T. punctatus* var. *candidatus* as a synonym of *judaicus*.

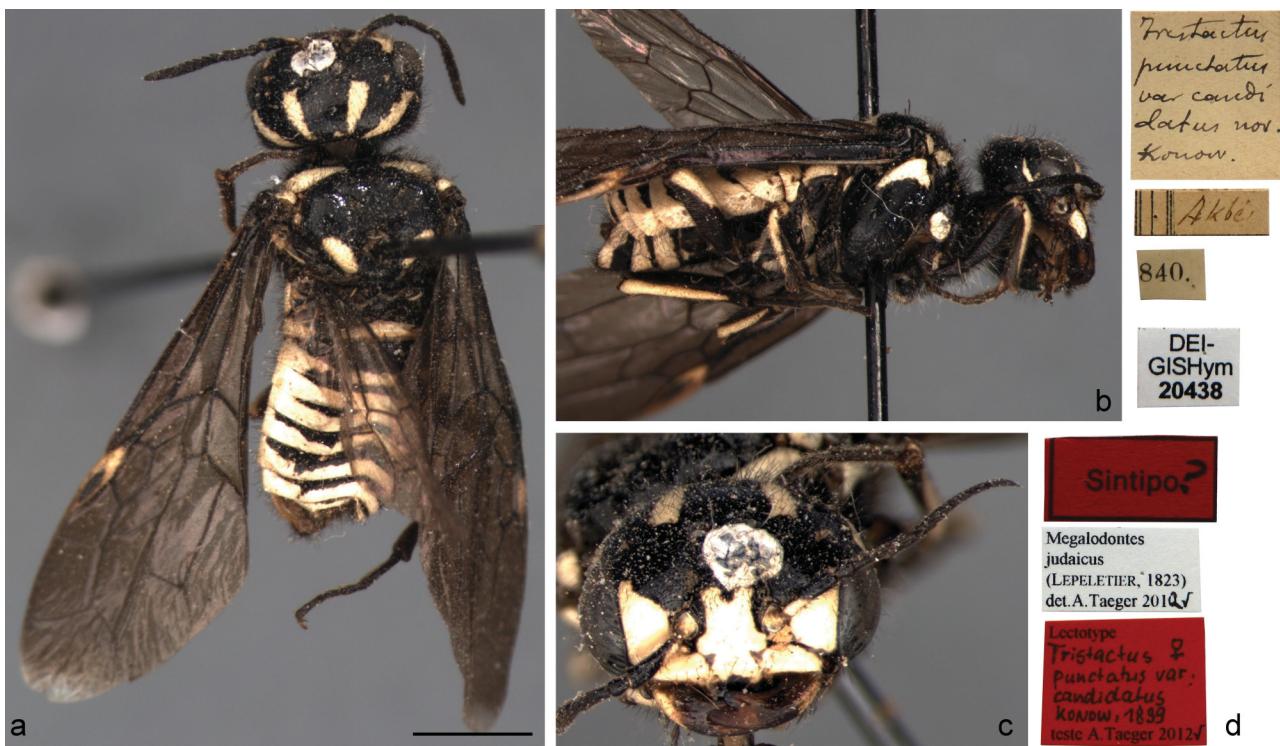


FIGURE 9. *Tristactus punctatus* var. *candidatus*, lectotype ♀. a. dorsal, scale 2 mm; b. lateral; c. face; d. labels.

Tenthredo capistrata Konow, 1907

A valid species, *Tenthredo capistrata* Konow, 1907.

Type. *Tenthredo capistrata* Konow, 1907b: 171–172. Syntypes ♂ ♀, “Sikkim”. Lectotype ♀, hereby designated, (MNCN_Ent 100193, MNCN Cat. Tipos N° 8126, Fig. 10, see also <http://dx.doi.org/10.6084/m9.figshare.755973>). Type locality: India, Sikkim. Paralectotype: ♂? (SDEI, see <http://dx.doi.org/10.6084/m9.figshare.787732>, without abdomen), same data as the lectotype.



FIGURE 10. *Tenthredo capistrata*, lectotype ♀. a. dorsal, scale 2 mm; b. lateral; c. face; d. head and thorax lateral; e. head and thorax dorsal; f. labels.

Discussion. Saini (2007: 107) mentioned a ♀ holotype and two paratypes (♂, ♀) in the SDEI (“IPAL, Eberswalde”). According to the original description, the types of *capistrata* are syntypes. Furthermore, the existence of three specimens in the SDEI was a speculation. Oehlke & Wudowenz (1984) already noted in the SDEI only a single, damaged syntype without abdomen. Saini (2007: 31) noted that the males and females of the

species are very differently colored. On the other hand, Konow (1907b) did not mention such a difference, but a slightly different shape of the head. It seems to be possible, that Konow had only the well preserved female (now lectotype) and a male without abdomen (now paralectotype) for the description.

Megalodontes capitalatus Konow, 1904

A valid species, *Megalodontes capitalatus* Konow, 1904.

Types. *Megalodontes capitalatus* Konow, 1904: 227–228. Syntypes ♂ ♀, “Hispania (Aranjuez)”. Lectotype ♂, hereby designated (SDEI, Fig. 11, see also <http://dx.doi.org/10.6084/m9.figshare.817915>). Type locality: Spain: Madrid: Aranjuez (40.028°N, 3.604°W, “Aranjuéz”). Paralectotype ♀ (MNCN Ent 81533, MNCN Cat. Tipos N° 2260, <http://dx.doi.org/10.6084/m9.figshare.850195>, same data as the lectotype).

Discussion. The male syntype from the SDEI collection is selected as lectotype, as it was examined by previous workers and used to interpret the species.



FIGURE 11. *Megalodontes capitalatus*, lectotype ♀. a. dorsal, scale 5 mm; b. lateral; c. head and thorax lateral; d. head and thorax dorsal; e. antenna; f. face; g. labels.

Tenthredopsis carinatus Malaise, 1931

A valid species, *Tenthredopsis carinata* Malaise, 1931.

Types. *Tenthredopsis carinatus* Malaise, 1931: 9 10. Syntypes, 30 ♂, 30 ♀, Petropawlowsk, Klutchi, Elisowo. Type localities: Russia: Kamtschatka: Petropawlowsk, Klutchi, Elisowo. Syntypes. 1♂, 1♀ “Kamtschatka” (♀ MNCN Ent 82400, <http://dx.doi.org/10.6084/m9.figshare.850189>, ♂ MNCN Ent 82401, MNCN Cat. Tipos N° 2271).

Discussion. Malaise distributed syntypes of *T. carinatus* to several museums. The specimens are labeled as paratypes, but according to the description they are syntypes. The lectotype should be selected from the remaining specimens in the NHRS collection.

Tenthredo casta Konow, 1908

A valid species, *Tenthredo* (*Olivacedo*) *casta* Konow, 1908.

Types. *Tenthredo casta* Konow, 1908: 22–23. Syntypes ♂ ♀, “Sikkim”. Lectotype ♀, hereby designated, (MNCN_Ent 82485, MNCN Cat. Tipos Nº 8127, Fig. 12, see also <http://dx.doi.org/10.6084/m9.figshare.756022>). Type locality: India, Sikkim.

Discussion. The other syntype(s) seem to be lost. In the SDEI only an original label attached to a pin could be found. Papers subsequent to the original description obviously always refer to the original description only. Saini (2007: 107) mentioned a ♀ holotype and a ♂ paratype in the SDEI (“IPAL, Eberswalde”). Such material does not exist. The species, hitherto unplaced within *Tenthredo*, belongs to the subgenus *Olivacedo* Zhelochovtsev, 1988.



FIGURE 12. *Tenthredo casta*, lectotype ♀. a. dorsal, scale 2 mm; b. lateral; c. head dorsal; d. face; e. labels.

Tenthredo celtica Benson, 1953

A junior subjective synonym of *Tenthredo* (*Temuledo*) *temula* Scopoli, 1763.

Types. *Tenthredo celtica* Benson, 1953: 275–277. Holotype ♀: England: Hertfordshire, Tring (BMNH, not examined). Paratypes from Great Britain, Ireland, Italy, and Spain. Paratype in MNCN: 1 ♀ from Vilatorta (MNCN_Ent 100256, MNCN Cat. Tipos Nº 2488).

Clydostomus cestatus Konow, 1908

A valid species, *Tenthredo cestata* (Konow, 1908).

Types. *Clydostomus cestatus* Konow, 1908: 20. Syntypes ♂ ♀, “Sikkim”. Lectotype ♀, hereby designated, (MNCN_Ent 82480, MNCN Cat. Tipos Nº 8128, Fig. 13, see also <http://dx.doi.org/10.6084/m9.figshare.756207>). Type locality: India, Sikkim. Paralectotypes: 1 ♂ (MNCN_Ent 82481, MNCN Cat. Tipos Nº 8128, <http://dx.doi.org/10.6084/m9.figshare.757297>), 1 ♀ (NHRS), 1 ♂ (? without abdomen, SDEI), all labeled “Sikkim”.

Discussion. The taxon is the type species of *Clydostomus* Konow, 1908. Malaise (1945) synonymized it with *Tenthredo*, and, based on the tridentate clypeus, within this genus with *Fethalia* Cameron, 1902 (type species *T. opposita*, see also discussion under *inguinalis*). But because of its rather different appearance it seems unlikely that *cestatus* is closely related to the group of *T. opposita*. In the course of a future reclassification of *Tenthredo* s.l., *Clydostomus* (which is older than Rohwer’s, Malaise’s, and Zhelochovtsev’s genus group names in *Tenthredo* s.l.) might be used again. Currently, the species is not placed in a subgenus. See also under *Clydostomus merceti*.



FIGURE 13. *Clydostomus cestatus*, lectotype ♀. a. dorsal; b. lateral, scale 5 mm; c. head and thorax dorsal; d. head and thorax lateral; e. face; f. labels.

Miocephala chalybea Konow, 1907

A valid species, *Arge chalybea* (Konow, 1907).

Types. *Miocephala chalybea* Konow, 1907b:163. Syntypes ♂ ♀, “Sikkim”. Lectotype ♂, hereby designated (SDEI, Fig. 14, see also <http://dx.doi.org/10.6084/m9.figshare.757697>). Type locality: India, Sikkim. Paralectotype: ♀ (MNCN_Ent 100240, MNCN Cat. Tipos Nº 8129, Fig. 15, see also <http://dx.doi.org/10.6084/m9.figshare.757694>).

Discussion. *Miocephala chalybea* is the type species of *Miocephala* Konow, 1907, which is treated today as a synonym of *Arge* Schrank, 1802. Already its original description by Konow (1907b) caused some confusion. Both sexes of the taxon were described, but he mentioned only for the female: “Die weibliche Type ist Eigentum des National-Museums in Madrid” [translated: ‘The female type is property of the National Museum in Madrid’]. The deposition of the male type(s) was not mentioned, and therefore it is to be expected in Konow’s collection (today at SDEI). Konow’s note about the female type cannot be interpreted as a designation of a holotype. A male labeled by Konow is housed in the SDEI collection, and this specimen seems to be the only specimen of the species that was examined by subsequent authors (Malaise 1937a: “the type... *Miocephala chalybea* Knw ♂”; Oehlke & Wudowenz 1984: “1 ♂, Syntypus”; Saini & Thind 1995: “Holotype, Coll. Konow ...♂”). Furthermore, Saini & Thind (1995) claimed that the female of the species is unknown. All other mentions of *chalybea* seem to be based not on examined material, but on the papers cited above. Konow’s redescription (Konow 1907e) is a translation of the Latin original description into German.

There are some discrepancies between the description and the available material. These concern primarily the coloration of the hind tibiae, that should be yellow (“tibiis posticis flavis”), and the body color, that should be black-blue (“nigro-coerulea”). In the male specimen the hind tibiae are very dark brown to black, and the thorax dorsally has a strong greenish tinge. On the other hand there is no doubt that the specimen is one of the syntypes, and Konow’s description regarding the male is inaccurate. The question, if the two specimens are conspecific or not, must be left unanswered. It seems not unlikely that they represent the same species, but more specimens are needed to prove this assumption. As all subsequent papers about the status of *Miocephala* and *chalybea* are based on the male, this specimen was selected as lectotype, even if the description of the species does not completely fit the type specimen.



FIGURE 14. *Miocephala chalybea*, lectotype ♂. a. dorsal, scale 2 mm; b. lateral; c. head and thorax dorsal; d. face; e. labels.



FIGURE 15. *Miocephala chalybea*, paralectotype ♀. a. dorsal, scale 2 mm; b. ventral; c. face; d. head dorsal; e. labels.

Arge chrysostoma Pasteels, 1963

A valid species, *Arge chrysostoma* Pasteels, 1963.

Type. *Arge chrysostoma* Pasteels, 1963: 548–549. Holotype ♀, “Lourenço Marques”. Type locality: Mozambique: Maputo (“Lourenço Marques”). The type specimen is in good condition (MNCN_Ent 82307, MNCN Cat. Tipos N° 2263, see <http://dx.doi.org/10.6084/m9.figshare.757715>).

Arge congrua Konow, 1907

A valid species, *Arge congrua* Konow, 1907.

Type. *Arge congrua* Konow, 1907c: 309. Holotype ♀, “Africa occ. (Kamerun)”. Type locality: Cameroon (“Kamerun”). The type specimen is in good condition (MNCN_Ent 82310, MNCN Cat. Tipos N° 12143, see <http://dx.doi.org/10.6084/m9.figshare.757716>).

Athalia cornubiae Benson, 1931

A valid species, *Athalia cornubiae* Benson, 1931

Types. *Athalia (Athalia) cornubiae* Benson, 1931: 110. Holotype ♀, England, Cornwall, Looe (BMNH, not examined). Paratypes from France, Italy, and Spain. Paratypes in MNCN: 1 ♀ from Covadonga (MNCN_Ent 82338), 1 ♀ from Villaverde (MNCN_Ent 82339) both MNCN Cat. Tipos N° 2267.

Peus cupreiceps Konow, 1907

A valid species, *Tenthredo (Metallopeus) cupreiceps* (Konow, 1907), **comb. nov., spec. rev.**

= *Metallopeus cupreolus* Malaise, 1945, **syn. nov.**

= *Metallopeus inermis* Malaise, 1945, **syn. nov.**

Types. *Peus cupreiceps* Konow, 1907b: 170. Syntypes ♀, “Sikkim”. Lectotype ♀, hereby designated (MNCN_Ent 100241, MNCN Cat. Tipos N° 8130, Fig. 16, see also <http://dx.doi.org/10.6084/m9.figshare.757717>). Type locality: India: Sikkim.

Metallopeus cupreolus Malaise, 1945: 185, plate IXe. Syntypes 1 ♂, 6 ♀ “Tibet (Gyangtse); North Burma (Adung Valley); Szechuan (Lunanfu); 3–4000 m”. Lectotype ♀, hereby designated (NHRS, Fig. 17, see also <http://dx.doi.org/10.6084/m9.figshare.757719>). Type locality: China: Szechuan: Long'an (ca. 32.41°N, 104.53°E, “Tatzaopin (Lunanfu)”). Paralectotypes: 1 ♀ Adung valley, 12000 ft 31.8.1931 (Myanmar: Kachin State, near Adunglong, ca. 28.2°N, 97.7°E); 1 ♀ Gyangtse, 12000 ft., 18.06.1905 (China: Xizang: Gyangtse, 28.95°N, 89.63°E (both NHRS). The whereabouts of the remaining paralectotypes (1 ♂, 3 ♀) are unknown.

Metallopeus inermis Malaise, 1945: 184, plate IXd. Holotype ♀, “Tibet, 4000 m. Type locality: Gyangtse” (BMNH, not examined). Type locality: China: Xizang: Gyangtse, 28.95°N, 89.63°E. Paratypes: 2 ♀ same locality (NHRS, Fig. 18, see also <http://dx.doi.org/10.6084/m9.figshare.757722>).

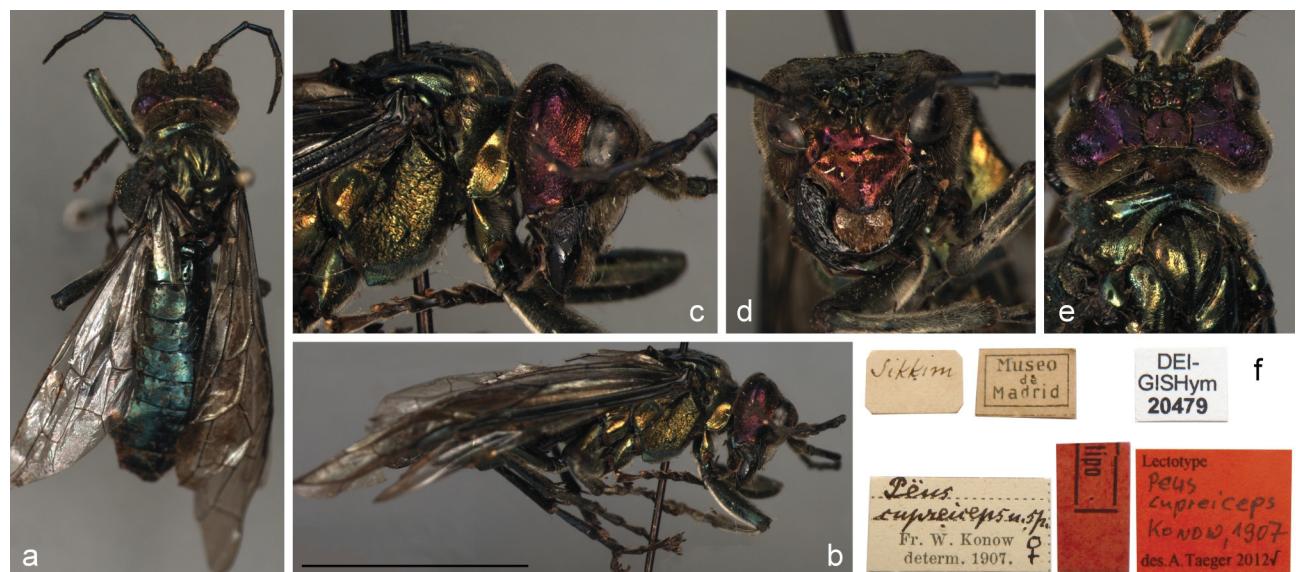


FIGURE 16. *Peus cupreiceps*, lectotype ♀. a. dorsal; b. lateral, scale 10 mm; c. head and thorax lateral; d. face; e. head and thorax dorsal; f. labels.

Discussion. Konow's description of *cupreiceps* contains no evidence that he had more than one specimen of the species to hand. Malaise (1945: 186) synonymized it with *M. splendidus* Konow (see below): “(1 ♀, compared with both paratypes, kindly sent from Berlin and Madrid respectively).” The first author has seen these two “paratypes” in the NHRS, one labeled *splendidus* (<http://dx.doi.org/10.6084/m9.figshare.773063>), the other *cupreiceps* (<http://dx.doi.org/10.6084/m9.figshare.773064>). Both specimens belong to *splendidus* as noted by

Malaise (*Tenthredo splendida*, Fig. 37 see below). On the other hand it is evident that both specimens were labeled subsequently by Dusmet, and not originally by Konow. It may be assumed that Dusmet mixed up the specimens of the taxa. Konow's description of *cupreiceps* is quite clear, as he describes the color of the head as coppery (and he derived the species name from this), whereas *splendidus* has a metallic green head. Malaise's *cupreolus* agrees very well with the type specimen of *cupreiceps* labeled by Konow (lectotype, MNCN), and therefore it is considered to be its junior synonym. Furthermore, Malaise described *M. inermis*, based on missing "mesosternal thorns". Otherwise, this taxon agrees with *cupreiceps*, and is known from the same locality (Gyangtse) as *cupreiceps*. There seem to be no further records of *inermis*. Saini (2007) recorded *inermis* for India, but characterized it as a species with (!) mesosternal thorns. His description fits normal *cupreiceps*. Morphological characters like the shape of the occipital carina, or the size of the tubercle in front of the front ocellus, seems to be rather variable in the group. The mesoscutellum of *cupreiceps* is slightly to very strongly pointed in the middle, in *inermis* nearly rounded. Variability in development of mesepisternal thorns is known to occur in other Palearctic species of *Tenthredo*, e.g., *T. trunca* Konow, 1908 (Malaise 1945), or *T. caucasica* Eversmann, 1847 (Taeger 1985). It might be, that the reduction of the thorns is connected somehow to the body size, the *inermis* (para-)types are only about 13–14 mm long, the *cupreolus* types 14–15 mm, and the *cupreiceps* lectotype nearly 19 mm. We suppose that *inermis* falls within the variability range of *cupreiceps*, and therefore consider it as its junior synonym.



FIGURE 17. *Metallopeus cupreolus*, lectotype ♀. a. dorsal, scale 5 mm; b. head and antennae dorsal; c. head and thorax ventrolateral; d. face; e. labels.

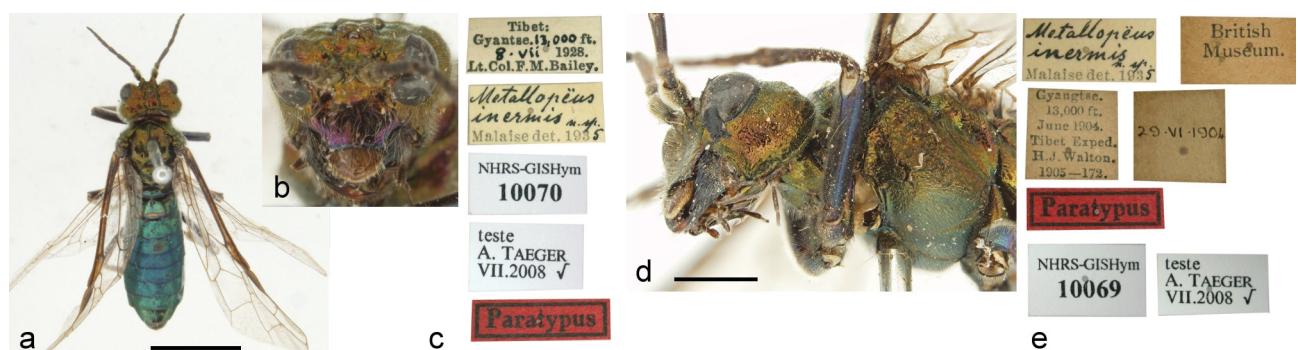


FIGURE 18. *Metallopeus inermis*, paratypes ♀. a. dorsal, scale 5 mm; b. face; c. labels; d. head and thorax ventrolateral; e. labels.

Allantus dusmeti Konow, 1894

A junior subjective synonym of *Tenthredo (Elinora) baetica* Spinola, 1843, synonymy with *Elinora baetica* by Benson (1968: 183).

Types. *Allantus Dusmeti* [sic!] Konow, 1894a: 96. Syntypes ♂ ♀ "Hispania [...] Madrid und bei Rivas". Lectotype ♀ hereby designated (SDEI, Fig. 19, see also <http://dx.doi.org/10.6084/m9.figshare.821216>) Type locality: Spain:

Madrid. Paralectotypes: 1 ♀ (MNCN_Ent 82398), 1 ♂ (MNCN_Ent 82399, <http://dx.doi.org/10.6084/m9.figshare.850213>) both from Rivas, leg. Dusmet, 14–5–[18]93, MNCN Cat. Tipos N° 2270.

Discussion. Benson (1968: 183) designated a lectotype from the SDEI collection (see <http://dx.doi.org/10.6084/m9.figshare.816890>). According to the reverse of the data label, this specimen was collected on 14-5-[190]2. Therefore, Benson's designation is invalid. Benson's systematic placement as a synonym of the highly variable *Tenthredo baetica* seems to be correct. Currently, it is considered to belong to the Iberian nominotypical subspecies (Taeger *et al.* 2010). The status of the more widely distributed subspecies *Tenthredo (Elinora) baetica dominiquei* (Konow, 1894b) is doubtful because of the overlapping distribution areas. It is not unlikely that *dominiquei* is a synonym of *baetica*, and that in this case subspecies cannot be separated.

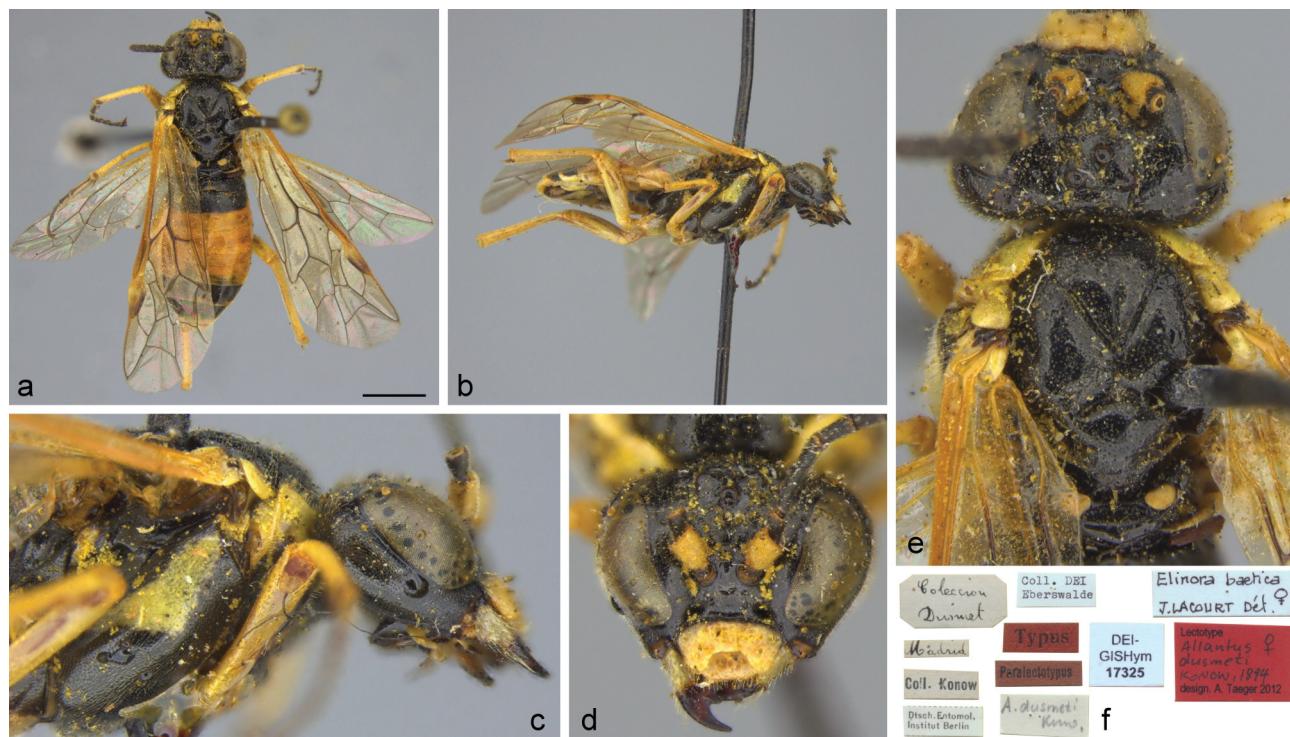


FIGURE 19. *Allantus dusmeti*, lectotype ♀. a. dorsal, scale 2 mm; b. lateral; c. head and thorax lateral; d. face; e. head and thorax dorsal; f. labels.

Amasis dusmeti Konow, 1905

A valid species, *Corynis dusmeti* (Konow, 1905).

Types. *Amasis dusmeti* Konow, 1905a: 242–243. Syntypes ♂ ♀, “Hispania et Algeria”. The lectotype (Spain: Ciudad Real: Pozuelo de Calatrava) will be selected from material in the SDEI in the course of the revision of the genus (Jacobs *et al.*, in prep.). The two syntypes (♂, ♀) of the MNCN (Pozuelo de Calatrava, ♂ MNCN_Ent 82336, ♀ MNCN_Ent 82337, MNCN Cat. Tipos N° 2266) will become paralectotypes (see <http://dx.doi.org/10.6084/m9.figshare.757802>).

Discussion. Syntypes from Algeria were found neither in MNCN nor in SDEI.

Megalodontes dusmeti Enslin, 1914

A valid species, *Megalodontes dusmeti* Enslin, 1914.

Types. *Megalodontes dusmeti* Enslin, 1914: 170. Syntypes ♀, “Spanien: Valencia, Orihuela.”. Lectotype ♀, hereby designated, (Fig. 20, see also <http://dx.doi.org/10.6084/m9.figshare.757868>, ZSM). Type locality: Spain: Alicante:

Orihuela. Paralectotype: 1 ♀ “Valencia” (<http://dx.doi.org/10.6084/m9.figshare.757832>, MNCN_Ent 81539, MNCN Cat. Tipos N° 10089).

Discussion. The species belongs to the *phaenicius* complex of *Megalodontes*. Taeger (2002: 465) discussed the validity of the species. Meanwhile, five females are known, and this material supports the validity of the taxon. Apart from the areas around Murcia and Valencia, one female was collected near Madrid (Vaciamadrid).

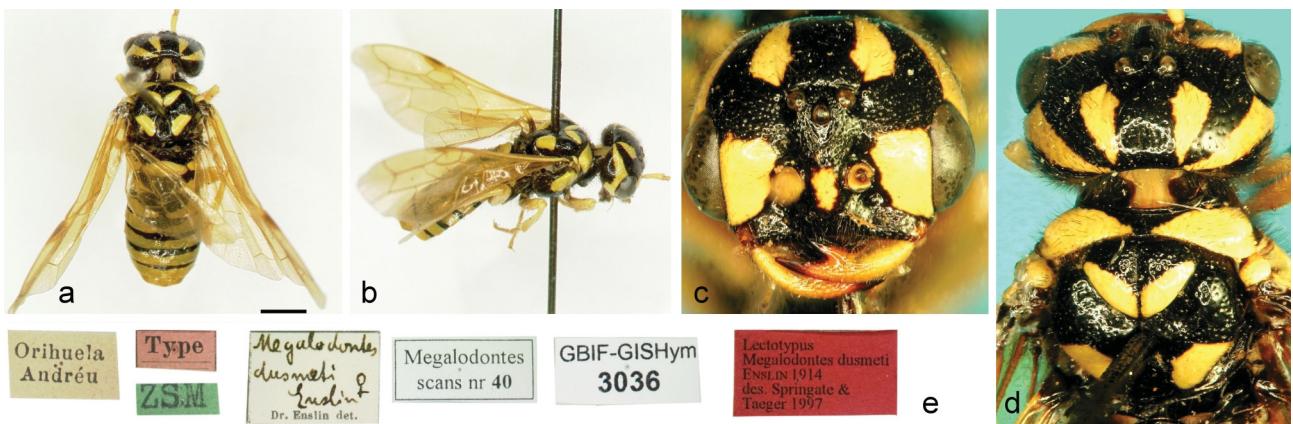


FIGURE 20. *Megalodontes dusmeti*, lectotype ♀. a. dorsal, scale 2 mm; b. lateral; c. face d. head and thorax dorsal; e. labels.

Periclista dusmeti Konow, 1907

A valid species, *Periclista* (*Periclista*) *dusmeti* Konow, 1907.

Types. *Periclista Dusmeti* [sic!] Konow, 1907a: 493. Syntypes ♂ ♀, “Pozuolo de Ca la Fuente, (...) Barcelona”. Syntypes: 2 ♂ “Pozuelo de C^A La Fuente” (MNCN_Ent 82340, see <http://dx.doi.org/10.6084/m9.figshare.758922>; MNCN_Ent 82341, both MNCN Cat. Tipos N° 10091); 1 ♂ same data (SDEI); 1 ♀ “Barcelona” (SDEI).

Discussion. The sexes were described from rather distant places: “Herr José Ma Dusmet y Alonso hat das Männchen dieser Art (...) in mehreren Exemplaren bei Pozuolo de Ca la Fuente aufgefunden ; das ♀ besitze ich von Barcelona” [translated: ‘Mr. José Ma Dusmet y Alonso found several specimens of the male of the species near Pozuelo de Ca la Fuente; the female I have from Barcelona’] (Konow 1907a). The correct locality name for the male record is Pozuelo de Calatrava, “La Fuente” is the collector’s name. The lectotype will be selected in the course of a revision of this difficult group (Mol, in prep.).

Megalodontes escalerai Konow, 1899

A valid species, *Megalodontes escalerai* Konow, 1899.

Types. *Megalodontes Escalerai* [sic!] Konow, 1899: 203, 205. Syntypes ♂ ♀, “Asia min. (Akbés, Alexandrette)” (on p. 203), “Akbés, Jenidje Kale” (on p. 205). Lectotype ♂, hereby designated (MNCN_Ent 81535, MNCN Cat. Tipos N° 9184, Fig. 21, see also <http://dx.doi.org/10.6084/m9.figshare.759546>). Type locality: Turkey: Hatay: Akbes (36.857°N, 36.518°E; “Akbés”). Paralectotypes: 1 ♀ 1 ♂ “Jenidje Kale” (♀ MNCN_Ent 81536, MNCN Cat. Tipos N° 9184; ♂ in SDEI), 2 ♀ “Akbés” (MNCN_Ent 81537 and 81538, MNCN Cat. Tipos N° 9184).

Discussion. There is a contradiction in the type localities given by Konow (see above). No specimen labeled “Alexandrette” could be found, but specimens from Akbés and Jenidje Kale (a place close to Akbes, ca. 36.883°N, 36.467°E). Therefore the locality “Alexandrette” (Iskenderun) may be wrong. There are several similar species in the genus *Megalodontes*. The lectotype from Akbes in eastern Turkey represents a more densely punctured form of the species. The form from western Turkey (e.g., Termessos, 36.982°N, 30.463°E) which is currently considered conspecific, is usually clearly less sculptured.



FIGURE 21. *Megalodontes escalerai*, lectotype ♂. a. dorsal, scale 2 mm; b. lateral; c. base of antenna; d. face; e. head and thorax dorsal; f. labels.

Tenthredo flavitarsis Konow, 1908

A valid species, *Tenthredo (Olivacedo) flavitarsis* Konow, 1908.

Types. *Tenthredo flavitarsis* Konow, 1908: 24–25. Syntypes ♀, “Sikkim”. Lectotype ♀, hereby designated, (MNCN_Ent 100244, MNCN Cat. Tipos N° 8131, Fig. 22, see also <http://dx.doi.org/10.6084/m9.figshare.759619>). Type locality: India, Sikkim. Paralectotype: ♀ (SDEI, <http://dx.doi.org/10.6084/m9.figshare.821267>), “Sikkim”.

Discussion. Malaise (1945) considered the paralectotype to be a paratype, Oehlke & Wudowenz (1984) as a questionable holotype, and Saini (2007: 116) implied that the specimen is the holotype. The species, hitherto unplaced within *Tenthredo*, belongs to the subgenus *Olivacedo* Zhelochovtsev, 1988.

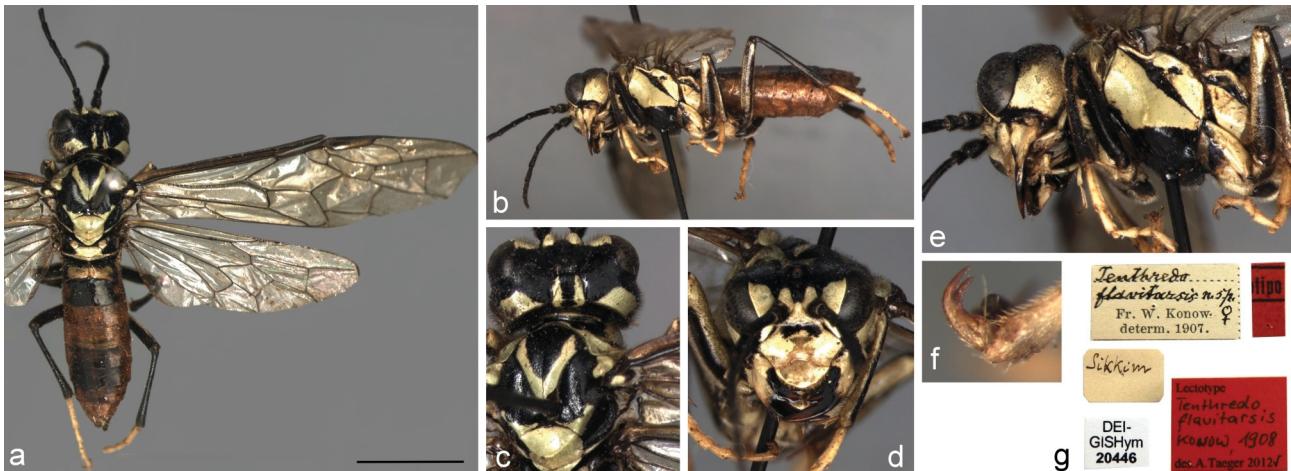


FIGURE 22. *Tenthredo flavitarsis*, lectotype ♀. a. dorsal, scale 5 mm; b. lateral; c. head and thorax dorsal; d. face; e. head and thorax lateral; g. labels.

Amauronematus forsiusi Enslin, 1915

A junior subjective synonym of *Amauronematus sollemnus* Konow, 1895, synonymy by Lindqvist (1961: 6).

Types. *Amauronematus forsiusi* Enslin, 1915: 384–385. Syntypes ♀ “im südlichen Finnland” [‘southern Finland’]. 3 ♀ syntypes MNCN (Finland: “Karislojo”, MNCN_Ent 82348–82350, see <http://dx.doi.org/10.6084/m9.figshare.850193> and <http://dx.doi.org/10.6084/m9.figshare.850194>, MNCN Cat. Tipos N° 2506). 1 ♀ sytype, ZSM (same data).

Discussion. Enslin (1915) mentioned ‘numerous specimens’ reared by Forsius. Further syntypes are to be expected in RFT. A lectotype designation should be made in the course of the revision of this difficult group. The status of *forsiusi* and *sollemnus* is still uncertain.

Pristiphora conjugata var. *forsiusi* Enslin, 1916

A valid species, *Pristiphora forsiusi* Enslin, 1916.

Types. *Pristiphora conjugata* var. *forsiusi* Enslin, 1916: 534. Syntypes ♀ [data given for *P. conjugata*:] “im mittleren und nördlichen Europa, auch in Italien” [‘in central and northern Europe, also Italy’]. 1 ♀ sytype MNCN (“Karislojo”, MNCN_Ent 82346, MNCN Cat. Tipos N° 2507. 1 ♀ sytype, ZSM (same data).

Discussion. Further syntypes are to be expected in RFT. A lectotype designation should be made in the course of the revision of this difficult group.

Sciopteryx galerita Konow, 1907

A valid species, *Tenthredo* (*Temuledo*) *galerita* (Konow, 1907).

Types. *Sciopteryx* [sic!] *galerita* Konow, 1907b: 164–165. Syntype(s) ♀, “Sikkim”. Lectotype ♀, hereby designated, (MNCN_Ent 100245, MNCN Cat. Tipos N° 8132, Fig. 23, see also <http://dx.doi.org/10.6084/m9.figshare.779756>). Type locality: India, Sikkim.

Discussion. The species was not treated by Malaise (1945). Saini (2007: 11) noted: “For want of detailed account and difficulty in translating, *T. galerita* (Konow) could not be inducted into the key.” Benson (1968: 187) examined the type specimen, and placed it in *Tenthredo*. *Tenthredo galerita* shows similarities with *T. religosa* Malaise, 1945, and *T. contraria* Malaise, 1945. Currently, it should be placed in the subgenus *Temuledo* Zhelochovtsev, 1988.

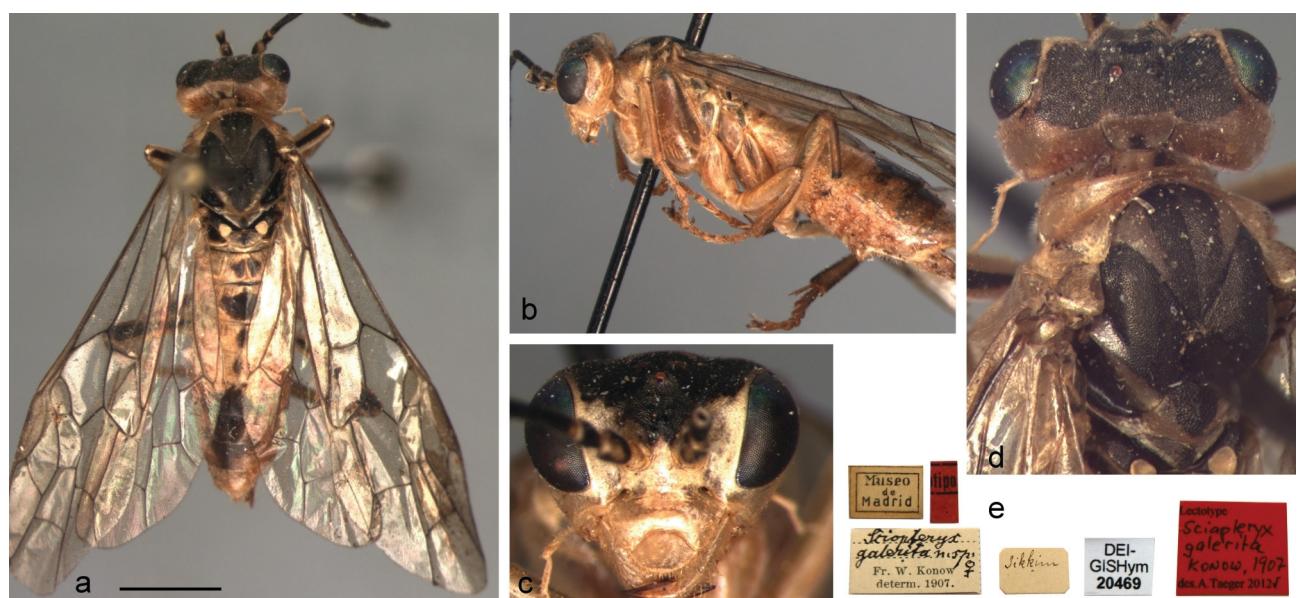


FIGURE 23. *Sciopteryx galerita*, lectotype ♀. a. dorsal, scale 2 mm; b. lateral; c. face; d. head and antennae dorsal; e. labels.

Stromboceros gratiosus Konow, 1907

A valid species, *Stromboceridae gratiosa* (Konow, 1907).

Types. *Stromboceros gratiosus* Konow, 1907a: 497. Holotype ♀, “México”. Type locality. Mexico. MNCN_Ent 82359, MNCN Cat. Tipos N° 2269 (see <http://dx.doi.org/10.6084/m9.figshare.852133>).

Discussion. The Latin description of the species contains an indication that Konow (1907a: 497) had more than one specimen to hand, as he gave a body size range from 8 to 8.5 mm. Furthermore he noted: “Die Type befindet sich im Naturhistorischen Nationalmuseum in Madrid” [translated: ‘The type is housed in the Natural History National Museum in Madrid’]. The latter is clearly a fixation of a holotype (MNCN). The specimen in the SDEI collection, labeled as paralectotype by Smith in 1976 (Oehlke & Wudowenz, 1984) is—if it is considered to be a type specimen—a paratype.

Tenthredo habenata Konow, 1907

A valid species, *Tenthredo habenata* Konow, 1907.



FIGURE 24. *Tenthredo habenata*, lectotype ♀. a. dorsal, scale 5 mm; b. lateral; c. head and thorax dorsal; d. head and thorax lateral; e. face; f. labels.

Types. *Tenthredo habenata* Konow, 1907b: 172–173. Syntypes ♀, “Sikkim”. Lectotype ♀, hereby designated, (MNCN_Ent 100195 MNCN Cat. Tipos N° 8133, Fig. 24, see also <http://dx.doi.org/10.6084/m9.figshare.759628>). Type locality: India, Sikkim. Paralectotype: ♀ (SDEI, <http://dx.doi.org/10.6084/m9.figshare.759631>), “Sikkim”.

Discussion. Oehlke & Wudowenz (1984) considered the paralectotype to be a questionable holotype, and Saini (2007: 116) implied that the specimen is the holotype. The two examined type specimens look rather different in coloration. The lectotype has the abdominal tergites mainly pale with black bases, whereas in the paralectotype the tergites are black with pale apical triangular spots in the middle. Most likely Konow’s “segmentorum abdominalium fasciis magis minusve latis flavidis” refers to this variability. Furthermore, the black color of the tips

of femora and tibiae and the black mark on the mesopleura is only distinct in the paralectotype, whereas in the lectotype these dark parts are brown. It is not possible to exclude that the rather pale color of the lectotype is a result of a bad conservation of the specimen, but it seems to be more likely that these parts never were black as in the paralectotype. Currently, the species is not placed in a subgenus.

Allantus inguinalis Konow, 1908

A valid species, *Tenthredo inguinalis* (Konow, 1908).

Types. *Allantus inguinalis* Konow, 1908: 20–21. Syntypes ♀, “Sikkim”. Lectotype ♀, hereby designated (MNCN Ent 100194, MNCN Cat. Tipos N° 8134, Fig. 25, see also <http://dx.doi.org/10.6084/m9.figshare.759669>). Type locality: India, Sikkim. Paralectotype: ♀, “Sikkim” (SDEI, see <http://dx.doi.org/10.6084/m9.figshare.795276>).

Discussion. Saini (2007: 116) implied that the paralectotype specimen from the SDEI is the holotype. The species is very similar to *T. opposita* (F. Smith, 1878) (= *Fethalia nigra* Cameron, 1902), the type species of *Fethalia*. Malaise (1945) considered *Fethalia* to be a subgenus of *Tenthredo*, but the tridentate clypeus (the only reason for subgeneric separation) seems to be a very weak character. In *inguinalis*, the clypeus is usually not tridentate. Currently, the species is not placed in a subgenus.

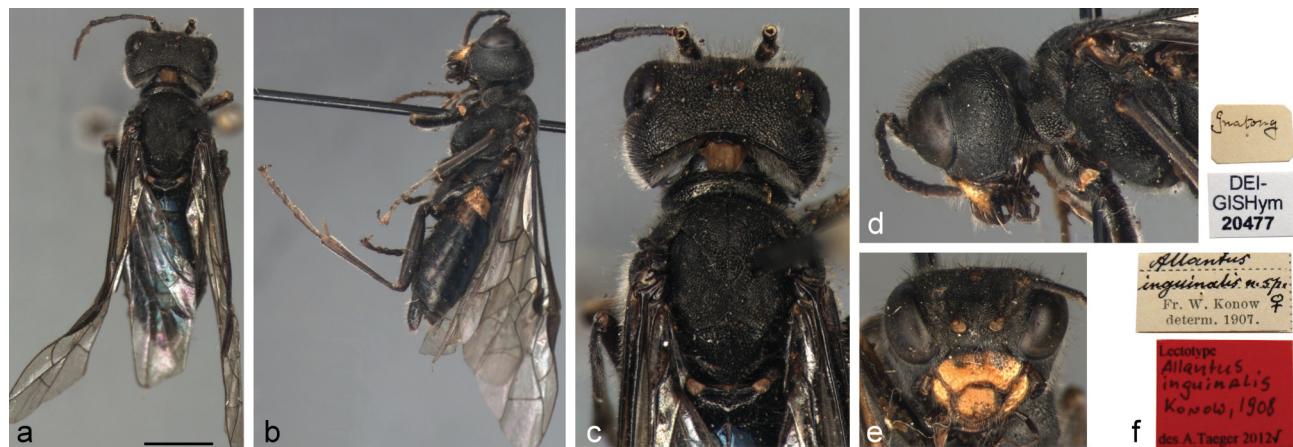


FIGURE 25. *Allantus inguinalis*, lectotype ♀. a. dorsal, scale 2 mm; b. lateral; c. head and thorax dorsal; d. head and thorax lateral; e. face; f. labels.

Allantus luminosus Konow, 1899

A subjective junior synonym of *Tenthredo (Zonuledo) flavipennis* Brullé, 1832. Synonymy by Benson (1968: 171).

Types. *Allantus luminosus* Konow, 1899: 204–205. Syntypes ♂♀, “As. Min. (Akbés). Lectotype ♂ designated by Taeger (1991a: 383) (SDEI, see <http://dx.doi.org/10.6084/m9.figshare.759772>). Type locality: Turkey: Hatay: Akbes (36.857°N, 36.518°E; “Akbés”). Paralectotypes: 3 ♀ (MNCN Ent 100198, 100199 and 100200), 2 ♂ (MNCN Ent 100196 and 100197), “Akbés”, MNCN Cat. Tipos N° 8135.

Discussion. The lectotype was selected by Taeger (1991a). Accordingly, the specimens of the MNCN are paralectotypes.

Tenthredo memoriaescalerai Haris, 2004

A valid species, *Tenthredo (Tenthredella) memoriaescalerai* Haris 2004.

Types. *Tenthredo memoriaescalerai* Haris, 2004a: 156–158. Holotype ♀, “Sikkim”, (MNCN_Ent 100201; figures see <http://dx.doi.org/10.6084/m9.figshare.759871>). Type locality: India, Sikkim. Paratypes: 2 ♀ (MNCN_Ent 100202 and 100203), “Sikkim”, MNCN Cat. Tipos N° 9889.

Discussion. The species shows affinities with *T. variicolor* Malaise, 1945 and *T. ferruginea* Schrank, 1776. It is to be placed in the subgenus *Tenthredella* Rohwer, 1910.

Allantus merceti Konow, 1905

A valid species, *Tenthredo (Paratenthredo) merceti* (Konow, 1905).

Types. *Allantus merceti* Konow, 1905b: 156–157. Syntypes ♀, “Hispania (Escorial)”. Lectotype ♀ designated by Taeger (1991b: 89–90) (SDEI, see <http://dx.doi.org/10.6084/m9.figshare.795279>). Type locality: Spain: Madrid: El Escorial (“Escorial”).

Discussion. There seem to be no further type specimens of this taxon in the MNCN collection.

Clydostomus merceti Konow, 1908

A junior subjective synonym of *Tenthredo cestata* (Konow, 1908), synonymy by Saini *et al.* (2006: 592).

Types. *Clydostomus merceti* Konow, 1908: 19–20. Syntype(s) ♀, “Sikkim”. Lectotype ♀, hereby designated, (MNCN_Ent 82479, MNCN Cat. Tipos N° 8137; Fig. 26, see also <http://dx.doi.org/10.6084/m9.figshare.757681>). Type locality: India, Sikkim.

Discussion. The taxon is very likely only a pale form of *T. cestata* as discussed by Saini *et al.* (2006). See also under *Clydostomus cestatus*.



FIGURE 26. *Clydostomus merceti*, lectotype ♀. a. dorsal, scale 5 mm; b. lateral; c. face; d. head and thorax dorsal; e. head and thorax lateral; f. labels.

Megalodontes merceti Konow, 1904

A valid species, *Megalodontes merceti* Konow, 1904.

Types. *Megalodontes merceti* Konow, 1904: 226–227. Syntypes ♂ ♀ “Hispania (Escorial, Vaciamadrid)”. Lectotype ♀ hereby designated (SDEI, Fig. 27, see also <http://dx.doi.org/10.6084/m9.figshare.918597>). Type locality: Spain: Madrid: El Escorial. (“Escorial”). Paralectotypes: 1 ♂ “Escorial” (<http://dx.doi.org/10.6084/m9.figshare.760595>, SDEI); 1 ♀ “Vaciamadrid” (SDEI); 1 ♂, 1 ♀ “Escorial” (HNHM, <http://dx.doi.org/10.6084/m9.figshare.761192>), 1

♂ 1 ♀ “Escorial” (NHMW), 2 ♂ “Escorial” (MNCN_Ent 81523 and 81524, MNCN Cat. Tipos 9981), 1 ♀ “Escorial” (<http://dx.doi.org/10.6084/m9.figshare.760466>, MNCN_Ent 81525, MNCN Cat. Tipos 9981).

Discussion. A female was selected as lectotype, which was labeled as lectotype (but designation not published) by previous workers. Most likely, further potential paralectotype specimens may be found in other museums. Obviously Dusmet sent many specimens in exchange to other museums. It is not clear, if all these specimens really were examined by Konow, but there is no evidence to exclude specimens collected before 1904 (or without collecting date), if they were collected by Mercet in Escorial or Vaciamadrid. The species seems to be restricted to the area around Madrid, none of the examined 160 specimens was found more distant than 100 km from Madrid. All examined material was collected between 1900 and 1946 (but nearly 100 specimens without date), later (22.06.2008) only one ♀ has been photographed in Rivas-Vaciamadrid on flowers of *Thapsia* (?), see <http://dx.doi.org/10.6084/m9.figshare.761200>.

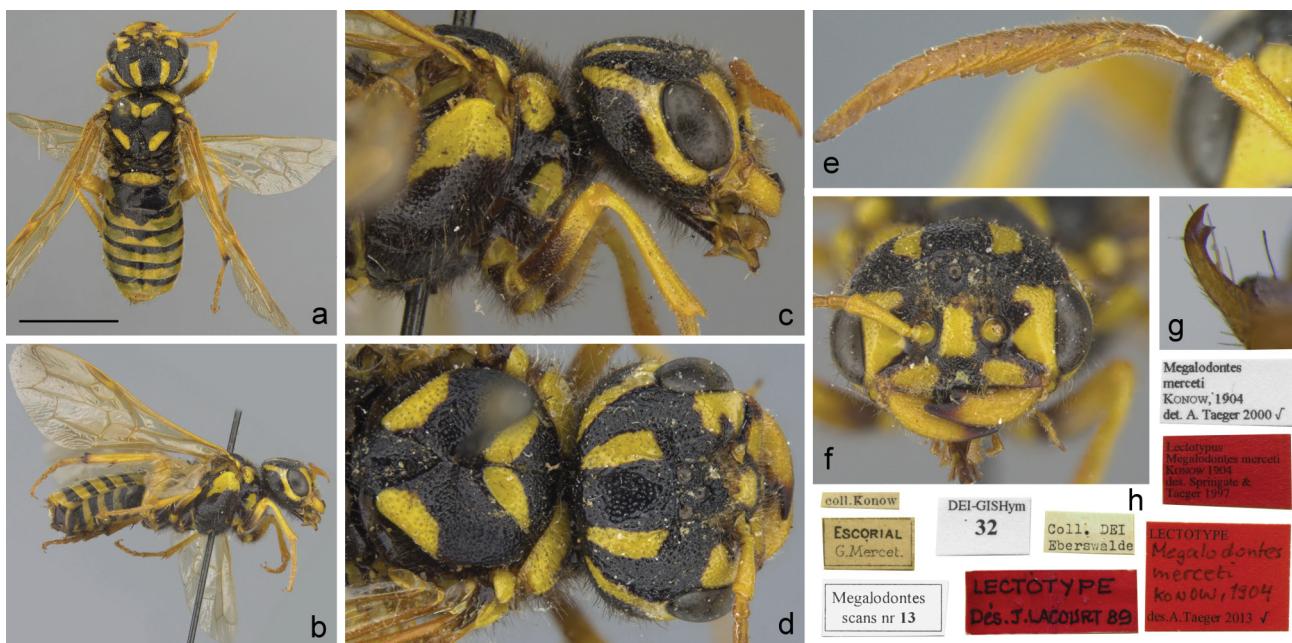


FIGURE 27. *Megalodontes merceti*, lectotype ♀. a. dorsal, scale 5 mm; b. lateral; c. head and thorax lateral; d. head and thorax dorsal; e. antenna; f. face; g. claw; h. labels.

Tenthredo minutosimplicis Haris, 2004

A valid species, *Tenthredo minutosimplicis* Haris, 2004.

Types. *Tenthredo minutosimplicis* Haris, 2004a: 158–160. Holotype ♀, “Sikkim” (MNCN_Ent 100204, MNCN Cat. Tipos N° 9888, see <http://dx.doi.org/10.6084/m9.figshare.762416>). Type locality: India, Sikkim.

Tenthredo mordax Konow, 1908

A valid species, *Tenthredo* (*Tenthredella*) *mordax* Konow, 1908.

Types. *Tenthredo mordax* Konow, 1908: 25–26. Syntype(s) ♀, “Sikkim”. Lectotype ♀, hereby designated, (MNCN_Ent 100205, MNCN Cat. Tipos N° 8138, Fig. 28, see also <http://dx.doi.org/10.6084/m9.figshare.762439>). Type locality: India, Sikkim.

Discussion. There is no indication in the original description, how many specimens Konow had to hand. Very likely it was a single female, which is selected here as lectotype. Apparently, after Konow (1908) nobody examined the type. Malaise (1945) followed only the original description, and Saini (207: 132) claimed that the type should be in the SDEI and is lost. The description given by Saini does not completely agree with the type specimen (e.g.,

several white marks on head and thorax). Possibly he treated a different species under the name *T. mordax*. *Tenthredo mordax* may be placed in the subgenus *Tenthredella* Rohwer, 1910.

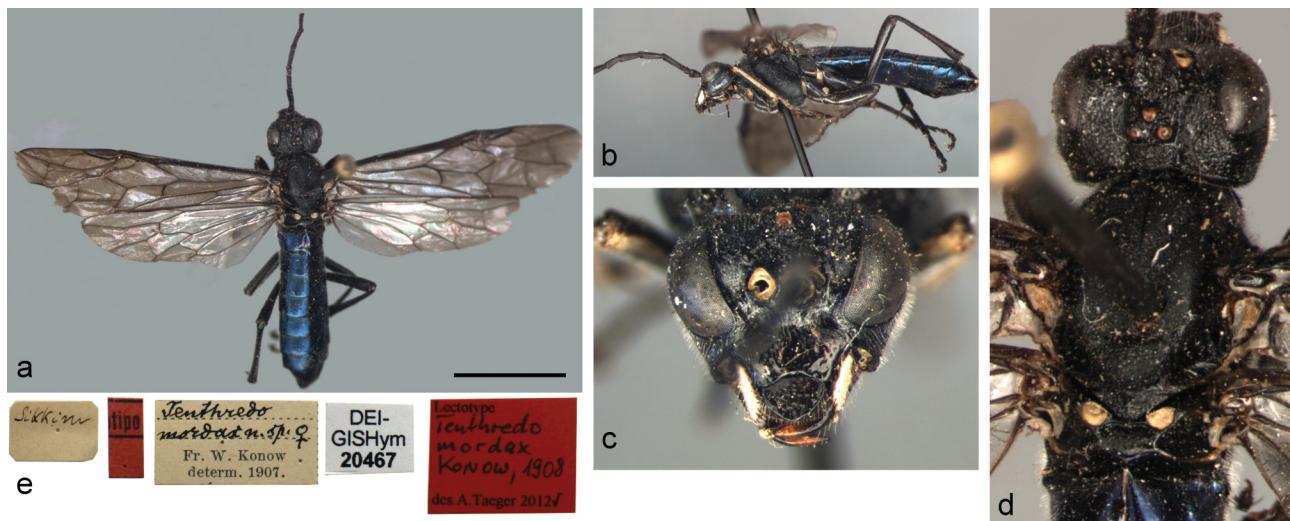


FIGURE 28. *Tenthredo mordax*, lectotype ♀. a. dorsal, scale 5 mm; b. lateral; c. face; d. head and thorax dorsal; e. labels.

Megalodontes mundus Konow, 1904

A valid species, *Megalodontes mundus* Konow, 1904.



FIGURE 29. *Megalodontes mundus*, lectotype ♀. a. dorsal, scale 2 mm; b. lateral; c. face; d. head lateral; e. head and thorax dorsal; f. labels.

Types. *Megalodontes mundus* Konow, 1904: 228–229. Syntypes ♀, “Hispania (Los Molinos)”. Lectotype ♀, hereby designated (MNCN_Ent 100206, MNCN Cat. Tipos N° 9979, Fig. 29, see also <http://dx.doi.org/10.6084/m9.figshare.763230>). Type locality: Spain: Madrid: Los Molinos. Paralectotypes: 2 ♀ (MNCN_Ent 81526 and 81527, MNCN Cat. Tipos N° 9979), 1 ♀ SDEI (<http://dx.doi.org/10.6084/m9.figshare.821284>), all data same as for lectotype.

Discussion. The taxon belongs to the *Megalodontes cephalotes* complex, and might be only a very pale form of *cephalotes*. Hitherto only known from the types, all collected on 7.7.1902 in Los Molinos near Madrid. This

would be the westernmost locality known for *cephalotes* (except for a specimen from Beges, Cantabria). Very similar pale forms of *cephalotes* (forma f according to Taeger 2002) are known from the Spanish Pyrenees, but these are less sculptured than *mundus*. *Megalodontes* species usually show clear differences in their COI barcodes. Perhaps fresh specimens might help to clarify the status of the taxon.

***Pristiphora nievesi* Haris, 2004**

A valid species, *Pristiphora (Pristiphora) nievesi* Haris, 2004.

Type. *Pristiphora nievesi* Haris, 2004b: 164–165. Holotype “El Ventorrillo, 1480 m, Madrid” (MNCN_Ent 100207, see <http://dx.doi.org/10.6084/m9.figshare.763315>). Type locality: Spain: Madrid: El Ventorrillo, 1480 m. Paratypes: 3 ♀ same data (MNCN_Ent 100208, 100209 and 100210). All specimens MNCN Cat. Tipos N° 9876.

***Tenthredo nigroypsilon* Haris, 2004**

A valid species, *Tenthredo nigroypsilon* Haris, 2004.

Type. *Tenthredo nigroypsilon* Haris, 2004a: 156–157. Holotype ♀, “Sikkim” (MNCN_Ent 100211, see <http://dx.doi.org/10.6084/m9.figshare.763321>). Paratypes: 3 ♀ same data (MNCN_Ent 100212 see <http://dx.doi.org/10.6084/m9.figshare.850210>, 100213 and 100214). Type locality: India, Sikkim. All specimens MNCN Cat. Tipos N° 9877.

Discussion. The apex of the abdomen of the holotype is missing.

***Labidarge nimbata* Konow, 1907**

A junior subjective synonym of *Scobina semifusca* (Norton, 1867), synonymy by Smith (1992: 25).

Type. *Labidarge nimbata* Konow, 1907d: 220. Holotype ♂ “Mexico” (MNCN_Ent 81544, MNCN Cat. Tipos N° 2262, see <http://dx.doi.org/10.6084/m9.figshare.765337>). Type locality: Mexico.

Discussion. Smith (1992: 25) designated the specimen as lectotype. In his work Konow (1907d) described three species. For *L. nimbata* he noted “Die Type befindet sich im Naturhist. National-Museum in Madrid” [translated: ‘The type is housed in the Natural History National Museum in Madrid’], similar for *L. pullipennis*, whereas he noted for *L. tegularis* “Die Typen gleichfalls im Madrider Museum” [‘The types are also in the Museum in Madrid’]. From this content is clear, that the first two species are based on holotypes, and *tegularis* on syntypes.

***Tenthredo nimbata* Konow, 1906**

A valid species, *Tenthredo (Eurogaster) nimbata* Konow, 1906.

Types. *Tenthredo nimbata* Konow, 1906: 126–127. Syntypes ♂ ♀, “Sikkim”. Lectotype ♀, hereby designated (MNCN_Ent 100222, MNCN Cat. Tipos N° 8118, Fig. 30, see also <http://dx.doi.org/10.6084/m9.figshare.765439>). Type locality: India, Sikkim. Paralectotypes: 1 ♂ 1 ♀ (SDEI), “Sikkim” (<http://dx.doi.org/10.6084/m9.figshare.765444>).

Discussion. Malaise (1945: 227) considered the SDEI ♀ to be a paratype, Saini (2007: 134) claimed erroneously that the holotype ♀ and two paratypes should be in the SDEI.

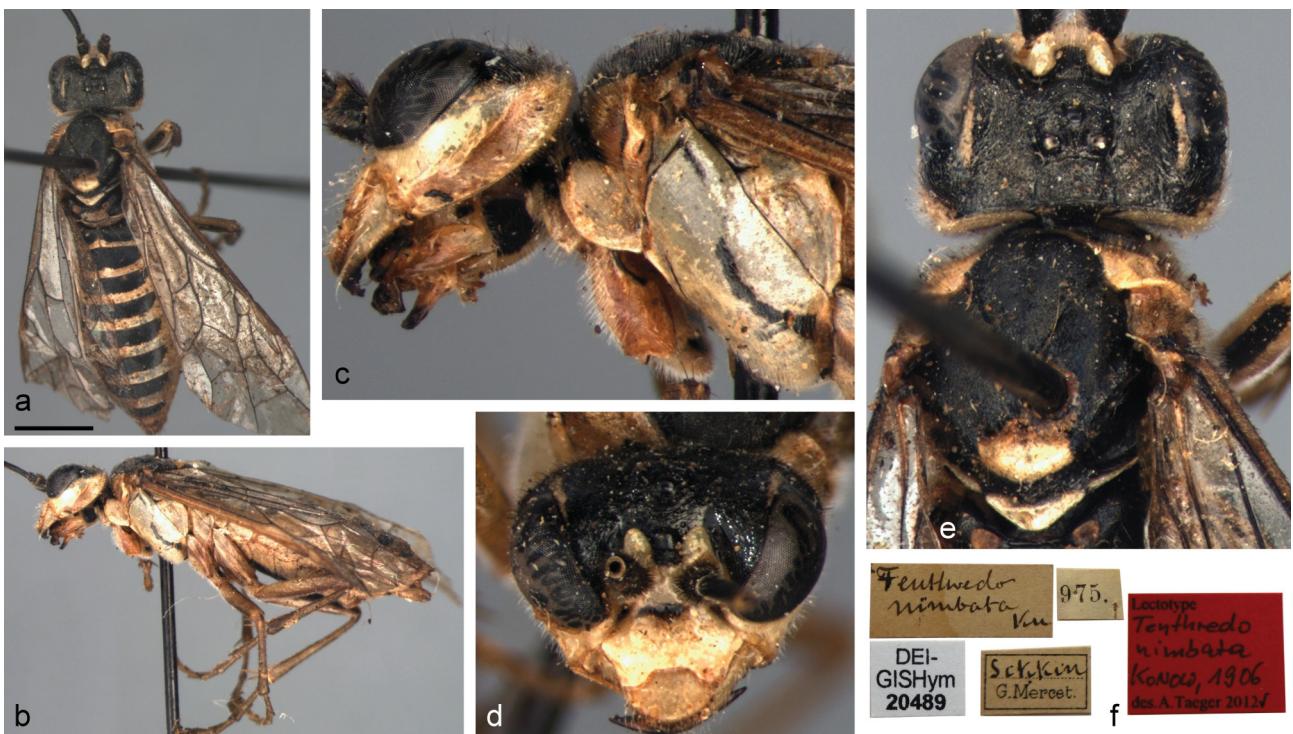


FIGURE 30. *Tenthredo nimbata*, lectotype ♀. a. dorsal, scale 2 mm; b. lateral; c. head and thorax lateral; d. face; e. head and thorax dorsal; f. labels.

Tenthredo oculissima Konow, 1907

A valid species, *Tenthredo oculissima* Konow, 1907.

Types. *Tenthredo oculissima* Konow, 1907b: 173. Syntypes ♂ ♀, “Sikkim”. Lectotype ♂, hereby designated (MNCN_Ent 100215, MNCN Cat. Tipos N° 8139, Fig. 31, see also <http://dx.doi.org/10.6084/m9.figshare.765451>). Type locality: India, Sikkim. Paralectotypes: 1 ♀ (MNCN_Ent 100216, MNCN Cat. Tipos N° 8139, <http://dx.doi.org/10.6084/m9.figshare.765453>), 1 ♂ 1 ♀ (SDEI, <http://dx.doi.org/10.6084/m9.figshare.766197>), all labeled “Sikkim”.

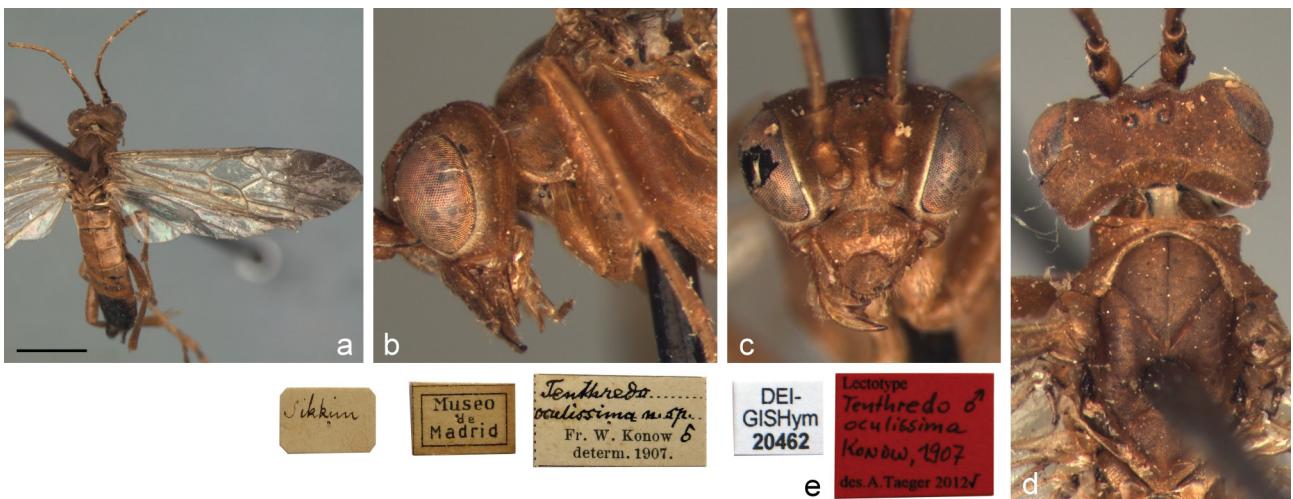


FIGURE 31. *Tenthredo oculissima*, lectotype ♂. a. dorsal, scale 2 mm; b. head and thorax lateral; c. face; d. head and thorax dorsal; e. labels.

Discussion. Malaise (1945: 211) considered a female (perhaps the specimen from MNCN) as “the type”, whereas Saini (2007: 134) erroneously noted that the holotype ♀ and a couple of paratypes should be in the SDEI. The species shows a very distinct sexual dimorphism.

Peus pannulosus Konow, 1907

A valid species, *Tenthredo* (*Peus*) *pannulosa* (Konow, 1907).

Types. *Peus pannulosus* Konow, 1907b: 168. Syntypes ♂ ♀, “Sikkim”. Lectotype ♀, hereby designated (MNCN_Ent 100223, MNCN Cat. Tipos N° 8140, Fig. 32, see also <http://dx.doi.org/10.6084/m9.figshare.766199>). Type locality: India, Sikkim. Paralectotype: 1♂, “Sikkim” (SDEI, <http://dx.doi.org/10.6084/m9.figshare.766237>).

Discussion. Saini (2007: 134) erroneously noted that the holotype ♀ and a ♀ paratype should be in the SDEI.

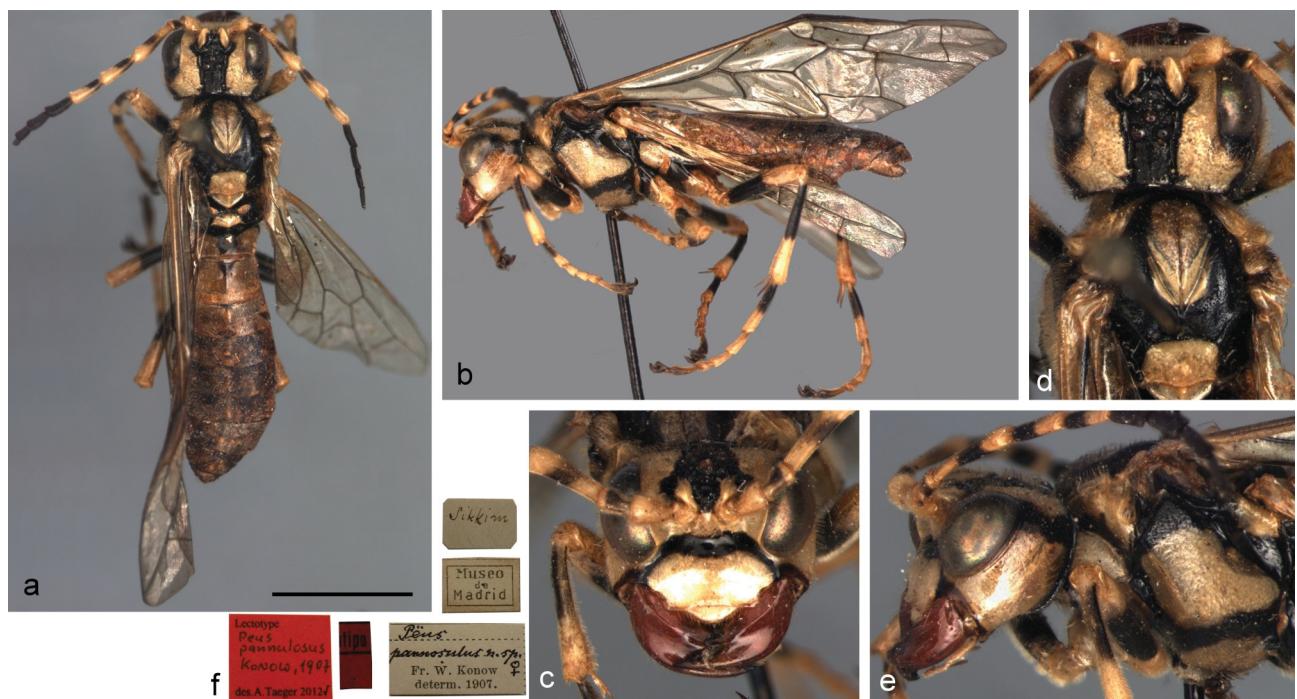


FIGURE 32. *Peus pannulosus*, lectotype ♀. a. dorsal, scale 5 mm; b. lateral; c. face; d. head and thorax dorsal; e. head and thorax lateral; f. labels.

Pontania phylicifoliae Forsius, 1919

A junior subjective synonym of *Pontania arcticornis* Konow, 1904, synonymy by Lindqvist (1955).

Types. *Pontania phylicifoliae* Forsius, 1919: 165–168. Syntypes ♂ ♀ “Typen ... aus Helsingfors (durch Zucht erhalten; Cotyphen aus Lojo und Karislojo).” Lectotype ♀ (Helsingfors, RFT, not examined), designated by Vikberg & Zinovjev (2006), a former designation by Kopalke (1991) is invalid. Paralectotypes not mentioned in Vikberg & Zinovjev (2006). In MNCN 1♂ paralectotype “Lojo” (MNCN_Ent 82343, MNCN Cat. Tipos N° 10220).

Tenthredo podagrifica Konow, 1907

A valid species, *Tenthredo podagrifica* Konow, 1907.

Types. *Tenthredo podagrifica* Konow, 1907b: 171. Syntype(s) ♀, “Sikkim”. Lectotype ♀, hereby designated

(MNCN_Ent 82504, MNCN Cat. Tipos N° 8141, Fig. 33, see also <http://dx.doi.org/10.6084/m9.figshare.766315>). Type locality: India, Sikkim.

Discussion. Saini (2007: 138) erroneously assumed that the holotype ♀ is in the SDEI.



FIGURE 33. *Tenthredo podagraria*, lectotype ♀. a. dorsal, scale 5 mm; b. lateral; c. head and thorax lateral; d. face; e. head and thorax dorsal; f. labels.

Tenthredo pseudomelaena Malaise, 1945

A valid species, *Tenthredo (Eurogaster) pseudomelaena* Malaise, 1945.

Types. *Tenthredo pseudomelaena* Malaise, 1945: 232. Syntypes, 9 ♂, 10 ♀, “Burma-Yunnan frontier”. Type locality: Myanmar: Kachin State: Kambaiti (ca. 25.399°N, 98.118°E). Syntypes 1♀, 1♂, Kambaiti (♀ MNCN_Ent 100263, <http://dx.doi.org/10.6084/m9.figshare.850208>, ♂ MNCN_Ent 100264, MNCN Cat. Tipos N° 9187).

Discussion. The MNCN specimens will be selected as paralectotypes in the course of a study of Malaise’s types (Taeger & Vårdal, in prep.). Other syntypes are known from the NHRS, HNHM, and the Naturkundemuseum Berlin.

Pteronidea pseudonotabilis Enslin, 1916

A junior subjective synonym of *Nematus (Pteronidea) bohemani* Thomson, 1871, synonymy by Lindqvist (1954: 159).

Types. *Pteronidea pseudonotabilis* Enslin, 1916: 417–418. Syntypes ♀, “Finnland”. Syntype (?) ♀ “Karislojo” (MNCN_Ent 82352, <http://dx.doi.org/10.6084/m9.figshare.853779>), 1 ♀ syntype, ZSM, “Karislojo”.

Discussion. Both, in MNCN and ZSM, specimens are to be found, which were apparently subsequently labeled as “Type” or “Paratype”. The MNCN specimen was labeled by Dusmet. Enslin (1916: 417–418) described only females, and claimed that the larva and the males are unknown. Forsius (1921) noted that the type material was reared in 1909 and 1910, and that he also got males. But obviously, this was unknown to Enslin. Forsius (1921)

also noted that he reared the species again in 1919, and described the larva and the male. Therefore, all males, and all specimens labeled “ex larva” in addition to the type label, are very likely not part of the type series. The ♀ specimen from ZSM is currently the only known type specimen with Enslin’s identification label. Perhaps more female syntypes may be found in RFT. A lectotype designation should be made in the course of the revision of this difficult group.

***Labidarge pullipennis* Konow, 1907**

A junior subjective synonym of *Scobina poecila* (Klug, 1834), synonymy by Smith (1992: 30).

Types. *Labidarge pullipennis* Konow, 1907d: 221. Holotype ♂ “Mexico” (MNCN Ent 81543, MNCN Cat. Tipos N° 2261, see <http://dx.doi.org/10.6084/m9.figshare.767315>). Type locality: Mexico.

Discussion. Smith (1992: 25) designated the specimen as lectotype, see discussion under *L. nimbata*.

***Laurentia (Laurentina) ruficornis* Malaise, 1937**

A valid species, *Aglaostigma (Neurosiobia) ruficorne* (Malaise, 1937).

Types. *Laurentia (Laurentina) ruficornis* Malaise, 1937b: 46. Syntypes: 14 ♂, 8 ♀ “Burma: Yunnan frontier, alt. 2.000 m.; China, prov. Szechuan Tatsienlu and Koutchéou” Type locality: Myanmar: Kachin State: Kambaiti (ca. 25.399°N, 98.118°E). Syntype ♂ “N.E. Burma, Kambaiti, 26/4. R. Malaise”. MNCN Ent 100265, MNCN Cat. Tipos N° 8142, <http://dx.doi.org/10.6084/m9.figshare.850204>.

Discussion. This specimen will be selected as paralectotype in the course of a study of Malaise’s types (Taeger & Vårdal, in prep.).

***Siobla rufipes* Malaise, 1945**

A junior subjective synonym of *Siobla atra* Malaise, 1945, synonymy by Niu & Wei (2013).

Types. *Siobla rufipes* Malaise, 1945: 124. Syntypes 30 ♂, “Burma-Yunnan frontier. Type locality: Kambaiti at 2000 m.” Lectotype ♂ (“N. E. BURMA, Kambaiti, 7000ft”, NHRS), designated by Niu & Wei (2013). Paralectotypes from the same locality in various collections. 1♂ in MNCN (MNCN Ent 100258, MNCN Cat. Tipos N° 8143).

***Arge segmentaria* var. *rufiventris* Konow, 1899**

A junior subjective synonym of *Arge rustica* (Linnaeus, 1758). Hitherto always treated as a synonym of the same species: *Arge segmentaria* (Panzer, 1803) = *Arge atrata* (Forster, 1771) = *Arge rustica* (Linnaeus, 1758) (Malaise & Benson 1934).

Types. *Arge segmentaria* var. *rufiventris* Konow, 1899: 204. Syntypes ♂ ♀, “ad Asiae minoris oppidum Akbes”. Lectotype ♀, hereby designated (MNCN Ent 82313, MNCN Cat. Tipos N° 2265, Fig.34, see also <http://dx.doi.org/10.6084/m9.figshare.767323>). Type locality: Turkey: Hatay: Akbes (36.857°N, 36.518°E; “Akbés”). Paralectotypes: 6 ♀ (MNCN Ent 82315–82320), 4 ♂ (MNCN Ent 82314, see <http://dx.doi.org/10.6084/m9.figshare.769203>, MNCN Ent 82321–82323, all MNCN Cat. Tipos N° 2265).

Discussion. The taxon requires further scrutiny. It seems quite possible, that several species are mixed up under the name *Arge rustica*. Currently about 10 nominal taxa are treated as synonyms of *A. rustica*. Recent results of COI barcoding show four different clusters for specimens identified as *A. rustica*. Referring to Konow (1899), the taxon was after its description only mentioned by Schedl (2009, for Syria) and in synonymy lists of catalogs. However, even if the locality Akbés in the late 19th and early 20th century has been associated with “Syria” in the historical sense, it belongs today to Turkey.



FIGURE 34. *Arge segmentaria* var. *rufiventris*, lectotype ♀. a. ventral, scale 2 mm; b. lateral; c. face; d. head and thorax dorsal; e. labels.

Tenthredo rugiceps Konow, 1908

A valid species, *Tenthredo (Eurogaster) rugiceps* Konow, 1908.

Types. *Tenthredo rugiceps* Konow, 1908: 24. Syntypes ♀, “Sikkim”. Lectotype ♀, hereby designated (MNCN_Ent 100237, MNCN Cat. Tipos N° 8144, Fig. 35, see also <http://dx.doi.org/10.6084/m9.figshare.769215>). Type locality: India, Sikkim. Paralectotypes: 1 ♀ MNCN_Ent 100238, MNCN Cat. Tipos N° 8144 (<http://dx.doi.org/10.6084/m9.figshare.769218>), 1 ♀ SDEI (<http://dx.doi.org/10.6084/m9.figshare.769219>), both “Sikkim”.

Discussion. Saini (2007: 141) erroneously claimed that the holotype ♀ and a ♀ paratype is in the SDEI. The species belong to the subgenus *Eurogaster* Zirngiebl, 1953.



FIGURE 35. *Tenthredo rugiceps*, lectotype ♀. a. dorsal, scale 5 mm; b. lateral; c. face; d. head and thorax lateral; e. head and thorax dorsal; f. labels.

Allantus rupico Konow, 1908

A junior subjective synonym of *Tenthredo (Eurogaster) maculiger dioctrioides* (Jakowlew, 1891), synonymy by Taeger (1988: 344).

Types. *Allantus rupico* Konow, 1908: 21–22. Syntypes ♂ ♀, “Sikkim”. Lectotype ♀ (SDEI, <http://dx.doi.org/10.6084/m9.figshare.903666>) designated by Taeger (1985: 137). Type locality: India, Sikkim. Paralectotypes: 1 ♀ “Gnatong” (MNCN_Ent 101344; <http://dx.doi.org/10.6084/m9.figshare.903668>), 1 ♂ “Sikkim” MNCN_Ent 101345 <http://dx.doi.org/10.6084/m9.figshare.903669>), 1 ♀ “Sikkim” (MNCN_Ent 101346) all MNCN Cat. Tipos N° 8145.

Discussion. The status of *dioctrioides* as subspecies of *Tenthredo maculiger* (Jakowlew, 1891) is uncertain.

Tenthredo segregata Konow, 1908

A valid species, *Tenthredo (Eurogaster) segregata* Konow, 1908.

Types. *Tenthredo segregata* Konow, 1908: 23–24. Syntype(s) ♀, “Sikkim”. Lectotype ♀, hereby designated (MNCN_Ent 100246, MNCN Cat. Tipos N° 8146, Fig. 36, see also <http://dx.doi.org/10.6084/m9.figshare.769237>). Type locality: India, Sikkim.

Discussion. Apparently, after Konow (1908) nobody examined the type(s) of *segregata*. Most likely it was a single female, which is selected here as lectotype. Malaise (1945) used only the original description, and Saini (2007: 56) followed Malaise. Their descriptions are somewhat misleading, as the species is characterized by them among other things by its completely black mesopleura. In reality, the mesopleura are mainly pale (green in life), only black in the upper corner (given as “*pleurorum suturis et mesopleurorum summo apice subalari nigris*” in Konow, 1908). The species belongs to the subgenus *Eurogaster* Zirngiebl, 1953.

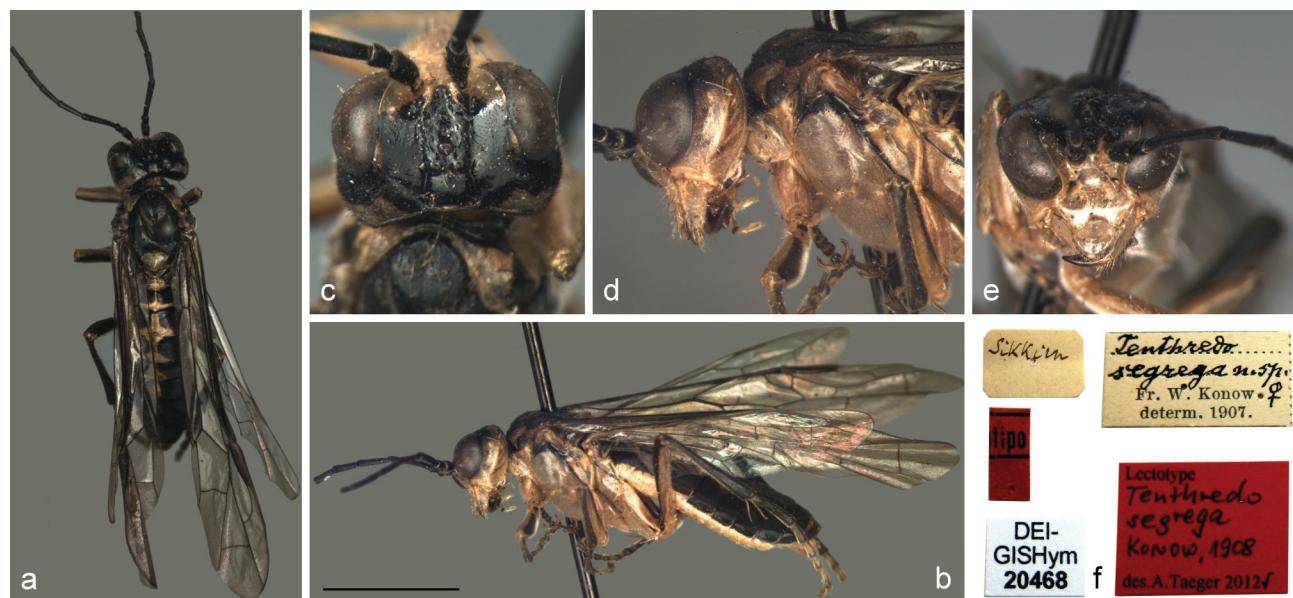


FIGURE 36. *Tenthredo segregata*, lectotype ♀. a. dorsal; b. lateral, scale 5 mm; c. head dorsal; d. head and thorax lateral; e. face; f. labels.

Allantus serenus Konow, 1899

A junior subjective synonym of *Tenthredo (Zonuledo) nazareensis* (André, 1881), synonymy by Taeger (1991a: 390).

Types. *Allantus serenus* Konow, 1899: 205. Syntypes ♂ ♀, “Asia min. (Alexandrette)”. Lectotype ♀, designated

by Taeger (1991a: 391), “Alexandrette” (SDEI, see <http://dx.doi.org/10.6084/m9.figshare.769243>). Type locality: Turkey: Iskenderun (“Alexandrette”). Paratypes: 1 ♂ (SDEI), 3 ♀ (MNCN_Ent 100248, 100249 and 100250), 1 ♂ (MNCN_Ent 100247) (MNCN_Ent 100247 and 100248, <http://dx.doi.org/10.6084/m9.figshare.769243>), all from “Alexandrette”, MNCN Cat. Tipos N° 8147.

Discussion. So far, the four specimens from MNCN have not been examined. These are also to be considered as paratypes.

Peus splendidus Konow, 1907

A valid species, *Tenthredo (Metallopeus) splendida* (Konow, 1907).

Types. *Peus splendidus* Konow, 1907b: 168–169. Syntypes ♀, “Sikkim”. Lectotype ♀, hereby designated (MNCN_Ent 100254, MNCN Cat. Tipos N° 8148, Fig. 37, see also <http://dx.doi.org/10.6084/m9.figshare.769250>). Type locality: India, Sikkim. Paratypes: 2 ♀, NHRS (<http://dx.doi.org/10.6084/m9.figshare.773063>, <http://dx.doi.org/10.6084/m9.figshare.773064>), 1 ♀ SDEI (<http://dx.doi.org/10.6084/m9.figshare.773058>), all “Sikkim”.

Discussion. See discussion under *Peus cupreiceps*.

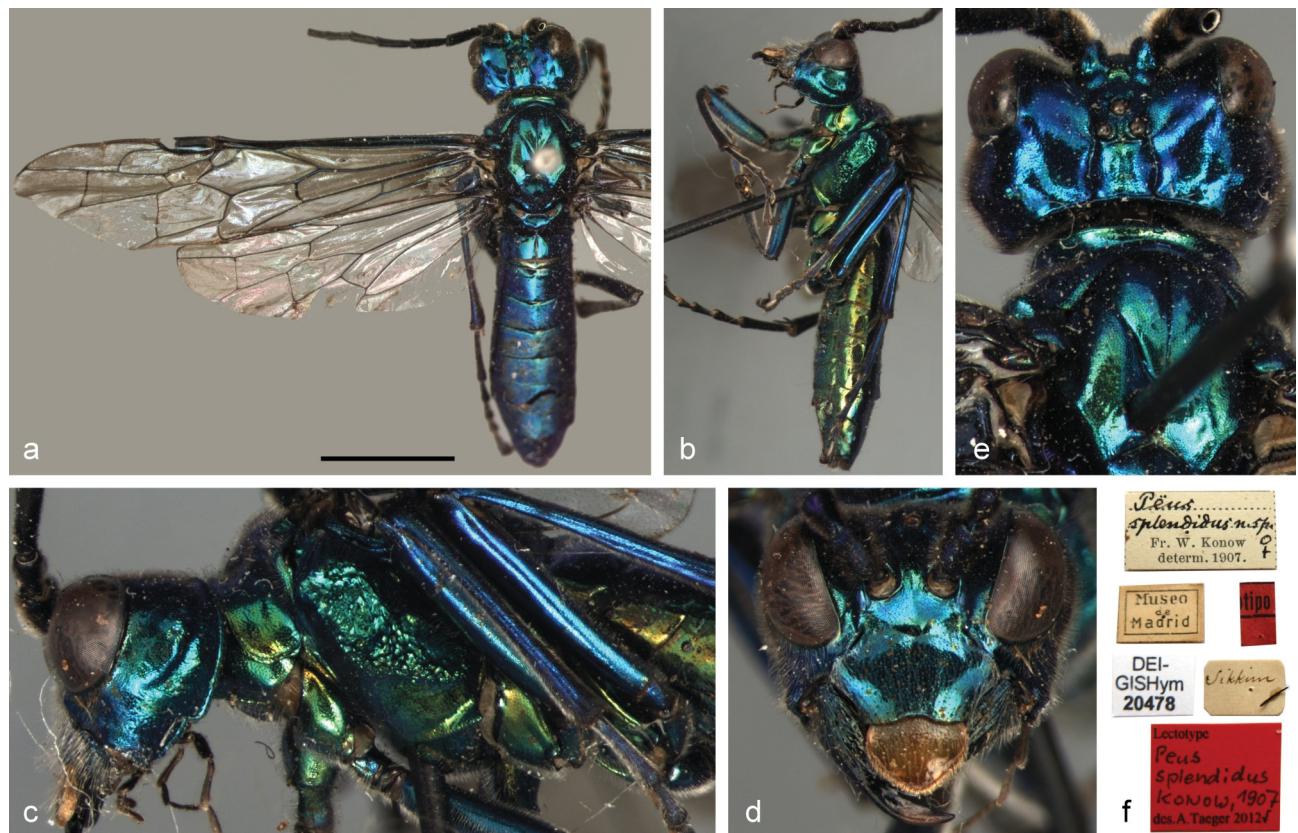


FIGURE 37. *Peus splendidus*, lectotype ♀. a. dorsal, scale 5 mm; b. lateral; c. head and thorax lateral; d. face; e. head and thorax dorsal; f. labels.

Sahlbergia struthiopteridis Forsius, 1910

A junior subjective synonym of *Thrinax contigua* Konow, 1885, synonymy with *Hemitaxonus contiguus* by Blank (1998: 218).

Types. *Sahlbergia struthiopteridis* Forsius, 1910: 50–51. Syntypes ♂, ♀, “Lojo”. Type locality: Finland: Uusimaa: Lojo (60.250°N 24.083°E). Syntypes: 1 ♂ “Lojo”, MNCN_Ent 82360, MNCN Cat. Tipos N° 2508; 1 ♀ “Lojo”, ZSM (<http://dx.doi.org/10.6084/m9.figshare.903671>).

Discussion. Further syntypes are to be expected in RFT. The lectotype should be selected from this collection, if necessary.

Pachyprotasis subtilis Malaise, 1945

A valid species, *Pachyprotasis subtilis* Malaise, 1945.

Types. *Pachyprotasis subtilis* Malaise, 1945: 150. Syntypes, 25 ♂, 15 ♀, “Burma-Yunnan frontier, 1800–2000 m”. Type locality: Myanmar: Kachin State: Kambaiti (ca. 25.399°N, 98.118°E). Syntypes: 1 ♂ “N.E. Burma, Kambaiti, 30/4. R. Malaise”, MNCN_Ent 100267; 1 ♀, same data but 23/6, MNCN_Ent 100266 (<http://dx.doi.org/10.6084/m9.figshare.850190>), both MNCN Cat. Tipos Nº 8149. Several syntypes in NHRS collection.

Discussion. The MNCN specimens will be selected as paralectotypes in the course of a study of Malaise’s types (Taeger & Vårdal, in prep.).

Tenthredo sutra Konow, 1906

A valid species, *Tenthredo (Olivacedo) sutra* Konow, 1906.

Types. *Tenthredo sutra* Konow, 1906: 127. Syntypes ♀, “Sikkim”. Lectotype ♀, hereby designated (MNCN_Ent 100255, MNCN Cat. Tipos Nº 2487, Fig. 38, see also <http://dx.doi.org/10.6084/m9.figshare.775302>). Type locality: India, Sikkim. Paralectotype: 1 ♀ SDEI (<http://dx.doi.org/10.6084/m9.figshare.775300>), “Sikkim”.

Discussion. Malaise (1945: 230) and Saini (2007: 148) both mentioned female and male types, but this is incorrect. Konow described only the female. The hitherto unplaced species belongs in the subgenus *Olivacedo* Zhelochovtsev, 1988.



FIGURE 38. *Tenthredo sutra*, lectotype ♀. a. dorsal, scale 5 mm; b. lateral; c. face; d. head and thorax lateral; e. head and thorax dorsal; f. labels.

Labidarge tegularis Konow, 1907

A junior subjective synonym of *Scobina terminalis* (Klug, 1814), synonymy by Smith (1992: 28).

Types. *Labidarge tegularis* Konow 1907d: 220–221. Syntypes ♂, “Brasilia, Coca.” Lectotype ♂, designated by

Smith (1992: 28, MNCN_Ent 81545, MNCN Cat. Tipos N° 11741, <http://dx.doi.org/10.6084/m9.figshare.775318>). Type locality: Ecuador: Puerto Francisco de Orellana (“Coca”). Paralectotype: 1 ♂ same data as the lectotype (MNCN_Ent 81546, MNCN Cat. Tipos N° 11741).

Discussion. Konow (1907d) assumed “Coca” to be a locality in Brazil, but it is a place in Ecuador. The green labels with the data of Pacific’s expedition were added as a result of a project cataloguing the insects collected in that Expedition (Santos Mazorra, 1994).

***Clyparge terminalis* Pasteels, 1963**

A valid species, *Clyparge terminalis* Pasteels, 1963.

Types. *Clyparge terminalis* Pasteels, 1963: 543–544. Holotype ♀, “Cameroun 1898–1899” (MNCN_Ent 82311, MNCN Cat. Tipos N° 10274 see <http://dx.doi.org/10.6084/m9.figshare.775321>). Type locality: Cameroon “Kamerun”. Paratype: 1 ♂ [?] same data (MNCN_Ent 82312, MNCN Cat. Tipos N° 10274).

***Megalodontes thor* Taeger, 2002**

A valid species, *Megalodontes thor* Taeger, 2002.

Types. *Megalodontes thor* Taeger, 2002: 476–477. Holotype ♀ Germany, Bavaria, Dingolfing, NSG Rosenau (SDEI, <http://dx.doi.org/10.6084/m9.figshare.913568>). Paratypes from C, SE and E Europe. In MNCN 1 ♂, 3 ♀ from Romania, Comana Vlasca (MNCN_Ent 81529– MNCN_Ent 81532, MNCN Cat. Tipos N° 9980).

Acknowledgments

The work of the first author at the Museo Nacional de Ciencias Naturales, Madrid was supported by the European Union-funded Integrated Activities grant SYNTHESYS (ES-TAF-1847), the examination of Malaise’s types in the Naturhistoriska riksmuseet, Stockholm became possible also through SYNTHESYS grants (SE-TAF 4856[2008], SE-TAF 1751[2012]). We wish to thank Dr H. Vårdal (Stockholm) for the loan of material.

Our thanks to Carolina Martín Albaladejo and Felicitas Ramírez Malo (Archive of the MNCN) for providing the images of Spanish entomologists included in this article, and Editha Schubert (Archive of the SDEI) for Konow’s portrait. Thanks for critical remarks and discussions to our colleagues at the SDEI, Dr S.M. Blank and A. Liston, who also corrected the English. We also wish to thank Dr F. Koch (Berlin) and an anonymous colleague for the review of the manuscript and Prof. A. Lelej (Vladivostok) for editing the paper.

References

Aksoy, A., Dixon, J.M. & Hale, W.H.G. (1998) *Capsella bursa-pastoris* (L.) Medikus (*Thlaspi bursapastoris* L., *Bursa bursa-pastoris* (L.) Shull, *Bursa pastoris* (L.) Weber). *Journal of Ecology*, 86 (1), 171–186.
<http://dx.doi.org/10.1046/j.1365-2745.1998.00260.x>

André, E. (1881) *Species des Hyménoptères d’Europe & d’Algérie*. Beaune (Côte-d’Or), 1 [1879–1882] (11), 565–596.

Benson, R.B. (1931) Notes on the British sawflies of the genus *Athalia* (Hymenoptera, Tenthredinidae), with the description of a new species. *The Entomologist’s Monthly Magazine, Third Series*, 67 (17), 109–114.

Benson, R.B. (1953) The sawfly *Tenthredo temula* of British authors is an undescribed species (Hym., Tenthredinidae). *The Entomologist’s Monthly Magazine, Fourth Series*, 89 (14), 275–277.

Benson, R.B. (1962) A revision of the Athaliini (Hymenoptera: Symphyta). *Bulletin of the British Museum (Natural History). Entomology series*, 11, 333–382.

Benson, R.B. (1968) Hymenoptera from Turkey, Symphyta. *Bulletin of the British Museum (Natural History). Entomology series*, 22 (4), 111–207.

Blank, S.M. (1998) Die mittel- und nordeuropäischen Selandriinae (Hymenoptera: Tenthredinidae). In: Taeger, A. & Blank, S.M. (Eds.), *Pflanzenwespen Deutschlands (Hymenoptera, Symphyta). Kommentierte Bestandsaufnahme*. Goecke & Evers, Keltern, pp. 207–224.

Brullé, A. (1832) Zoologie. Deuxième Section. Des animaux articulés. *Expédition scientifique de Morée. Section des sciences physiques*, 3 (1), 64–395; Fol. 1–29.

Cameron, P. (1902) Descriptions of new genera and species of Hymenoptera collected by Major C. G. Nurse at Deesa, Simla and Ferozepore. Part II. *Journal of the Bombay Natural History Society*, 14 (3), 419–449.

Dusmet, J.M. [Dusmet y Alonso, J.M.] (1896) Algunos datos para el estudio de los Tenthredínidos de España. *Anales de la Sociedad Española de Historia Natural*, 2. Ser., 5 [=25], 119–172 (reprint pp. 1–54).

Dusmet, J.M. (1949) Revisión de los Tenthredínidos de España. *Publicaciones de la Real Academia de Ciencias Exactas, Físicas y Naturales (Centenario)*, Madrid, 1(10), 441–484.

Enslin, E. (1914) Ueber Tenthrediniden aus Spanien. Nebst einer Bestimmungstabelle der paläarktischen *Tomostethus*. *Archiv für Naturgeschichte*, 79 Abt. A [1913] (9), 165–171.

Enslin, E. (1915) Die Tenthredinoidea Mitteleuropas IV. *Deutsche Entomologische Zeitschrift*, [1915] (Beiheft 4), 311–412.

Enslin, E. (1916) Die Tenthredinoidea Mitteleuropas V. *Deutsche Entomologische Zeitschrift*, [1916] (Beiheft 5), 413–538.

Eversmann, E. (1847) Fauna hymenopterologica volgo-uralensis exhibens Hymenopterorum species quas in provinciis Volgam fluvium inter et montes Uralenses sitis observavit et nunc descripsit. *Bulletin de la Société Impériale des Naturalistes de Moscou*, 20 (1), 3–68.

Fitton, M.G. (1978) Hymenoptera. In: Kloet, G.S. & Hincks, W.D. (Eds.), *A checklist of British Insects. Handbooks for the Identification of British Insects*, 11 (4), 1–159.

Forsius, R. (1910) Eine neue Selandriaden-Gattung. *Meddelanden af Societas pro Fauna et Flora Fennica*, 36 [1909–1910], 49–52, 218.

Forsius, R. (1919) Kleinere Mitteilungen über Tenthredinoiden I. *Meddelanden af Societas pro Fauna et Flora Fennica*, 45 [1918–1919], 165–169.

Forsius, R. (1921) Zur Kenntniss einiger Blattwespen und Blattwespenlarven II [recte III]. *Meddelanden af Societas pro Fauna et Flora Fennica*, 46 [1919–1920], 25–32.

Forster, J.R. (1771) *Novae species insectorum. Centuria I*. T. Davies & B. White, Londini, pp. i–iv + 1–100.

Haris, A. (2004a) Four new *Tenthredo* Linnaeus, 1758 species from Sikkim (Hymenoptera, Tenthredinidae). *Graellsia*, 60 (2), 155–161.
<http://dx.doi.org/10.3989/graelessia.2004.v60.i2.210>

Haris, A. (2004b) New sawflies from Spain (Hymenoptera, Tenthredinidae). *Graellsia*, 60 (2), 163–165.
<http://dx.doi.org/10.3989/graelessia.2004.v60.i2.211>

International Commission on Zoological Nomenclature (ICZN) (1999) *International code of zoological nomenclature. Fourth edition*. London (International Trust for zoological Nomenclature), i–xxix + 1–306.

Jacobs, H.J., Blank, S.M. & Taeger, A. (in litt.) The dwarf cimbicids, *Corynis* (Hymenoptera, Cimbicidae): identification and distribution.

Jakowlew, A. (1891) Diagnoses Tenthredinidarum novarum ex Rossia Europaea, Sibiria, Asia Media et confinum. *Trudy Russkogo Entomologiceskogo Obscestva v S. Peterburge*, 26 [1892], 1–62 (Separatum, preprint). [in Russian and Latin]

Klug, F. (1814) Die Blattwespen nach ihren Gattungen und Arten zusammengestellt. *Der Gesellschaft Naturforschender Freunde zu Berlin Magazin für die neuesten Entdeckungen in der gesamten Naturkunde*, 6 (1812) (4), 276–310.

Klug, F. (1815) Die Blattwespen nach ihren Gattungen und Arten zusammengestellt. *Der Gesellschaft Naturforschender Freunde zu Berlin Magazin für die neuesten Entdeckungen in der gesamten Naturkunde*, 7 (1813) (2), 120–131.

Klug, F. (1834) Uebersicht der Tenthredinetae der Sammlung. *Jahrbücher der Insectenkunde mit besonderer Rücksicht auf die Sammlung des Königl. Museum in Berlin herausgegeben*, 1, 223–253.

Koch, F. (1998) Die Symphyta der Äthiopischen Region. Gattung *Neaciophora* Enslin 1911 (Insecta: Hymenoptera: Tenthredinidae: Allantinae). *Entomologische Abhandlungen, Staatliches Museum für Tierkunde in Dresden*, 58 [1997] (5), 83–118.

Konow, F.W. (1885) Ueber die Blattwespen Gattungen *Strongylogaster* Dahlb. und *Selandria* Klg. *Wiener entomologische Zeitung*, 4, 19–26.

Konow, F.W. (1894a) Neue europäische Blattwespen, nebst Bemerkungen über einige bisher verkannte Arten. *Wiener Entomologische Zeitung*, 13, 84–96.

Konow, F.W. (1894b) Une nouvelle Tenthredinide de France. *Revue d'Entomologie, Caen*, 13, 284.

Konow, F.W. (1895) Analytische und kritische Bearbeitung der Gattung *Amauronematus* Knw. *Természetrajzi Füzetek*, 18, 166–187.

Konow, F.W. (1897) Systematische und kritische Bearbeitung der Blattwespen-Tribus Lydini. *Annalen des K. K. Naturhistorischen Hofmuseums, Wien*, 12 (1), 1–32.

Konow, F.W. (1898) Neue Asiatische Tenthrediniden. *Entomologische Nachrichten (Herausgegeben von Dr. F. Karsch)*, 24 (7), 105–109.

Konow, F.W. (1899) Chalastogastrorum novae species et varietates, quas D. Escalera ex Asia minore reportavit. *Actas de la Sociedad Española de Historia Natural*, 28 (7), 203–207.

Konow, F.W. (1904) Neue paläartische [sic!] Chalastogastra. *Zeitschrift für systematische Hymenopterologie und Dipteroologie*, 4 (4), 226–231.

Konow, F.W. (1905a) Zwei neue *Amasis*-Arten. (Hym.). *Zeitschrift für systematische Hymenopterologie und Dipteroologie*, 5 (4), 242–244.

Konow, F.W. (1905b) De Tenthredinibus Miscellanea. (Hym.). *Zeitschrift für systematische Hymenopterologie und Dipteroologie*, 5 (3), 151–157.

Konow, F.W. (1906) Ueber einige Tenthrediniden der alten Welt. (Hym.). *Zeitschrift für systematische Hymenopterologie und Dipteroologie*, 6 (2), 122–127.

Konow, F.W. (1907a) Neue Blattwespen (Hym.). *Deutsche Entomologische Zeitschrift*, 1907, 489–497.

Konow, F.W. (1907b) Neue Chalastogastra aus den naturhist. Museen in Hamburg und Madrid. *Zeitschrift für systematische Hymenopterologie und Dipteroologie*, 7 (2), 161–174.

Konow, F.W. (1907c) Neue Argides. (Hym.). *Zeitschrift für systematische Hymenopterologie und Dipteroologie*, 7 (4), 306–309.

Konow, F.W. (1907d) Drei neue *Labidarge*-Arten. (Hym.). *Zeitschrift für systematische Hymenopterologie und Dipteroologie*, 7 (3), 220–221.

Konow, F.W. (1907e) Systematische Zusammenstellung der bisher bekannt gewordenen Chalastogastra (Hymenopterorum subordo tertius). *Zeitschrift für systematische Hymenopterologie und Dipteroologie*, 7 (5), 417–432 [= 2, 145–160].

Konow, F.W. (1908) Neue Tenthrediniden aus Sikkim. (Hym.). *Zeitschrift für systematische Hymenopterologie und Dipteroologie*, 8 (1), 19–26.

Kopelke, J.-P. (1991) Die Arten der *viminalis*-Gruppe, Gattung *Pontania* O. Costa 1859, Mittel- und Nordeuropas (Insecta: Hymenoptera: Tenthredinidae). *Senckenbergiana Biologica*, 71 [1990] (1–3), 65–128.

Lepeletier, A.L.M. [Lepeletier de Saint Fargeau] (1823) *Monographia Tenthredinetarum synonymia extricata*. Apud Auctorem [etc.], Parisiis, pp. 1–176.

Lindqvist, E. (1954) Eine Revision der von Thomson beschriebenen Nematinen (Hym. Tenthredinidae). *Opuscula Entomologica*, 19, 150–164.

Lindqvist, E. (1955) Beitrag zur Kenntnis einiger nordischen Blattwespen (Hym., Tenthredinoidea). *Notulae Entomologicae*, 35, 137–144.

Lindqvist, E. (1961) Über *Amauronematus tunicatus* Zadd. und naheverwandte Arten (Hym., Tenthred.). *Notulae Entomologicae*, 41, 5–8.

Linnaeus, C. (1758) *Systema Naturae, per regna tria naturae secundum classes, ordines, genera, species cum characteribus, differentiis, synonymis, locis. Editio Decima, Reformata. Vol. 1. 10th Ed.* Laurentius Salvius, Holmiae, 824 pp.

Malaise, R. (1931) Entomologische Ergebnisse der schwedischen Kamtchatka Expedition 1920–1922. (35. Tenthredinidae). [Separatum]. *Arkiv för Zoologi*, 23[1931–1932] (2 [A8]), 1–68.

Malaise, R. (1937a) Old and new genera of Arginae (Hymen. Tenthred.). *Entomologisk Tidskrift*, 58 (1–2), 47–59.

Malaise, R. (1937b) New Tenthredinidae mainly from the Paris Museum. *Revue française d'Entomologie*, 4, 43–53.

Malaise, R. (1945) Tenthredinoidea of South-Eastern Asia with a general zoogeographical review. *Opuscula Entomologica, Lund, Suppl.* 4, 1–288.

Malaise, R. & Benson, R.B. (1934) The Linnean Types of Sawflies (Hymenoptera, Symphyta). *Arkiv för Zoologi*, 26 (4 [A20]), 1–14.

Martín Albaladejo, C. (2004) *Bibliografía entomológica de autores españoles (1758–2000)*. CD-ROM. Museo Nacional de Ciencias Naturales, CSIC. ISBN: 84–609–3574–4.

Mol, A. (in prep.) Revision of the Genus *Periclista* Konow.

Niu, G.-Y. & Wei, M. (2013) Revision of the *Siobla formosana* group (Hymenoptera: Tenthredinidae). *Zootaxa*, 3746 (1), 41–68.
<http://dx.doi.org/10.11646/zootaxa.3746.1.2>

Norton, E. (1867) Catalogue of the described Tenthredinidae and Uroceridae of North America. *Transactions of the American Entomological Society*, 1 (1), 31–84.
<http://dx.doi.org/10.2307/25076170>

Oehlke, J. & Wudowenz, J. (1984) Katalog der in den Sammlungen der Abteilung Taxonomie der Insekten des Institutes für Pflanzenschutzforschung, Bereich Eberswalde (ehemals Deutsches Entomologisches Institut), aufbewahrten Typen - XXII (Hymenoptera: Symphyta). *Beiträge zur Entomologie*, 34 (2), 363–420.

Panzer, G.W.F. ([1803]) *Faunae Insectorum Germanicae initia oder Deutschlands Insecten*. Nürnberg, Felssecker 8[1801–1804] (86–94), each 1–24 pp. & 24 col. plates.

Pasteels, J.-J. (1963) Prodrome d'une faune des Tenthredinoidea de l'Afrique noire. IV. - 2e supplement aux Argidae. *Bulletin & annales de la Société Royale d'Entomologie de Belgique*, 99 (37), 540–560.

Radoszkovsky, O. (1871) Hyménoptères de l'Asie. Description et énumération de quelques espèces reçues de Samarkand, Astrabad, Himalaya et Ning-Po, en Chine. *Horae Societatis Entomologicae Rossicae*, 8 (3), 187–200, pl. VII.

Rohwer, S.A. (1910) Japanese sawflies in the collection of the United States National Museum. *Proceedings of the United States National Museum*, 39 (1777), 99–120.
<http://dx.doi.org/10.5479/si.00963801.1777.99>

Saini, M.S. (2007) Genus *Tenthredo* Linnaeus (Hymenoptera, Symphyta: Tenthredinidae). In: *Indian Sawflies Biodiversity Keys, Catalogue & Illustrations*. Bishen Singh Mahendra Pal Singh, Dehra Dun 1, pp. [1–7] + 1–249.

Saini, M.S., Blank, S.M. & Smith, D.R. (2006) Checklist of the Sawflies (Hymenoptera: Symphyta) of India. In: Blank, S.M., Schmidt, S. & Taeger, A. (Eds.), *Recent Sawfly Research: Synthesis and Prospects*. Goecke & Evers, Keltern, pp. 575–612.

Saini, M.S. & Thind, A.S. (1995) Revision of genus *Arge* Schrank from India (Hymenoptera, Symphyta, Argidae). *Deutsche entomologische Zeitschrift, Neue Folge*, 42 (1), 71–111.
<http://dx.doi.org/10.1002/mmnd.19950420109>

Santos Mazorra, C.M. 1994) *Catálogo de los insectos recolectados por la comisión científica del Pacífico (1862–1865)*. Manuales técnicos de museología, 5. Museo Nacional de Ciencias Naturales, Madrid. 1–196.

Schedl, W. (2009) Die Pflanzenwespen von Syrien (Hymenoptera: Symphyta) – ein Überblick. *Linzer biologische Beiträge*, 41 (2), 1609–1630.

Schrank, F. von P. (1776) *Beyträge zur Naturgeschichte*. Gebr. Veith, Augsburg, [6] + 137 + [3] pp.

Schrank, F. von P. (1802) *Fauna Boica. Durchgedachte Geschichte der in Baiern einheimischen und zahmen Thiere. Zweiter Band. Zweite Abtheilung*. Bey Johann Wilhelm Krüll, Ingolstadt, 412 pp.

Scopoli, I.A. (1763) *Entomologia Carniolica exhibens insecta Carnioliae indigena et distributa in ordines, genera, species, varietates, methodo Linneana*. Vindobonae, I.T. Trattner, [2]+[8]+[22]+420+[4] pp.

Smith, D.R. (1992) A synopsis of the sawflies (Hymenoptera: Symphyta) of America south of the United States: Argidae. *Memoirs of the American Entomological Society, Philadelphia*, 39, 1–201.

Smith, D.R. (2006) A new sawfly genus from India for the "forgotten" *Periclista bumasta* Konow, 1907 (Hymenoptera: Tenthredinidae). *Entomological News*, 117 (3), 261–264.
[http://dx.doi.org/10.3157/0013-872x\(2006\)117\[261:ansgfi\]2.0.co;2](http://dx.doi.org/10.3157/0013-872x(2006)117[261:ansgfi]2.0.co;2)

Smith, F. (1878) Hymenoptera. *Scientific results of the second Yarkand mission; based upon the collections and notes of the late Ferdinand Stoliczka, Ph. D.* Calcutta, pp. 1–22.

Spinola, M. (1843) Sur quelques Hyménoptères peu connus, recueillis en Espagne, pendant l'année 1842, par M. Victor Ghiliani, voyageur-naturaliste. *Annales de la Société Entomologique de France*, Ser. 2, 1, 111–162.

Taeger, A. (1985) Zur Systematik der Blattwespengattung *Tenthredo* (s. str.) L. (Hymenoptera, Symphyta, Tenthredinidae). *Entomologische Abhandlungen*, 48 [1984] (8), 83–148.

Taeger, A. (1988) Dritter Beitrag zur Kenntnis der Blattwespengattung *Tenthredo* L. (Hymenoptera, Symphyta: Tenthredinidae). *Beiträge zur Entomologie*, 38 (2), 337–359.

Taeger, A. (1991a) Vierter Beitrag zur Systematik der Blattwespengattung *Tenthredo* Linnaeus. Die Untergattung *Zonuledo* Zhelochovtsev, 1988 (Hymenoptera, Tenthredinidae). *Entomofauna. Zeitschrift für Entomologie*, 12 (23), 373–398.

Taeger, A. (1991b) Zwei neue paläarktische Blattwespengattungen aus der Unterfamilie Tenthredininae (Insecta, Hymenoptera, Symphyta: Tenthredinidae). *Entomologische Abhandlungen*, 54 (3), 71–95.

Taeger, A. (1998) Die Megalodontesidae Europas (Hymenoptera: Symphyta). In: Taeger, A. & Blank, S.M. (Eds.), *Pflanzenwespen Deutschlands (Hymenoptera, Symphyta). Kommentierte Bestandsaufnahme*. Goecke & Evers, Keltern, pp. 175–192.

Taeger, A. (2002) The Megalodontesidae of Europe (Hymenoptera, Symphyta). In: Viitasaari, M. (Ed.), *Sawflies (Hymenoptera, Symphyta) I. A review of the suborder; the Western Palaearctic taxa of Xyeloidea and Pamphilioidea*. Tremex Press Ltd., Helsinki, pp. 461–480.

Taeger, A. Blank, S.M. & Liston, A.D. (2010) World Catalog of Symphyta (Hymenoptera). *Zootaxa*, 2580, 1–1064.

Taeger, A. & Vårdal, H. (in prep.) Revision of René Malaise's types in the Naturhistoriska riks museet, Stockholm.

Thomson, C.G. (1871) *Hymenoptera Scandinaviae (Tenthredo et Sirex Lin.)*. Vol. 1. Lundae, H. Olsson. pp. 1–342.

Vikberg, V. & Zinovjev, A. (2006) On the taxonomy and the host plants of North European species of *Eupontania* (Hymenoptera: Tenthredinidae: Nematinae). *Beiträge zur Entomologie*, 56 (2), 239–268.

Zhelochovtsev, A.N. (1988) 27. Otryad Hymenoptera–Pereponchatokrylye Podotryad Symphyta (Chalastogastra)–Sidyachebryuhie [by Zhelochovtsev, A.N. & Zinovjev, A.G.] In: Zhelohovcev, A.N., Tobias, V.I. & Kozlov, M.A. (Eds.), *Opredelitel' nasekomyh evropejskoj chasti SSSR. T. III. Pereponchatokrylye. Shestaja chasti. (Opredeliteli po faune SSSR, izdavaemye Zoologicheskim institutom AN SSSR; Vyp. 158)*. [27. Order Hymenoptera–Wasps Suborder Symphyta (Chalastogastra)–Sawflies and woodwasps. Key to the insects of the European part of the USSR. Vol. III. Hymenoptera. Sixth part. (Keys to the fauna of the USSR, edited by the Zoological Institute of the Academy of Sciences of the USSR; Vol. 158).] Nauka, Leningrad, pp. 7–237. [in Russian]

Zirngiebl, L. (1953) Tenthredinoiden aus der Zoologischen Staatssammlung in München. *Mitteilungen der Münchener Entomologischen Gesellschaft*, 43, 234–238.